

**CAREER DEVELOPMENT FOR UNDECIDED LATINO/A COLLEGE
STUDENTS: A PHENOMENOLOGICAL STUDY**

A Dissertation

by

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ABSTRACT

This study explored the experience of being undecided about academic majors for Latino/a college students who were changing their academic majors (i.e., *major changers*). Findings provide fresh insights for career development (CD) professionals who wish to assist this student population. Four problems drove the purpose of this study: (a) There is a dearth of CD literature focusing on Latinos/as, (b) Latino/a enrollment in degree-granting institutions is increasing but their degree completion lags behind other groups, (c) there is a shortage of research specifically related to Latino/a college students who are undecided about academic majors, and (d) CD professionals must understand this student group's experience of being undecided in order to serve these students. Phenomenology was selected as the methodology for this qualitative study. Data were collected from 11 participants through two separate rounds of interviews and an open-ended questionnaire. Participants met four main criteria: undecided about an academic major, self-identified as Latino/a, freshman or sophomore status, and changing the academic major at a 4-year, bachelor degree-granting institution of higher education. Data were analyzed using interpretive phenomenological analysis techniques.

Research findings yielded four superordinate emergent themes: (a) motivators for attending college, (b) selection of original major, (c) reasons for indecision, and (d) impact of being undecided. Each superordinate theme included four to seven subthemes. Seven conclusions were drawn from examining the experience of being undecided about

academic majors for Latino/a college students: (a) Exploration is key, (b) family influence is prominent, (c) racial and ethnic identity intersects CD, (d) balancing expectations and personal desires is difficult, (e) balancing financial need and personal desires is difficult, (f) first-generation students face added complexity, and (g) Latina students face added complexity. Recommendations for human resource development practice, theory, and research were presented.

DEDICATION

This document is dedicated to my wife, Melissa Shehane; to my son, William Shehane; and to my daughter, Lillian Shehane. Melissa, Will, and Lily are the most important people in my life and I could not have completed this journey without their constant love and support.

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CHAPTER I

INTRODUCTION

According to McDonald and Hite (2005), career development (CD) is an established focal point within the human resource development (HRD) discipline but it tends to be overshadowed by research focused on other aspects of HRD, such as organization development (OD) and training and development (T&D). Egan, Upton, and Lynham (2006) suggested that there is a perceived hierarchy in HRD where CD is viewed as being subordinate to OD, which in turn is subordinate to T&D. However, with a growing emphasis on preparing college students to enter careers (National Association of Colleges and Employers, 2016), CD initiatives seem poised to enter the forefront of HRD as it relates to higher education.

Historically, CD services in American higher education initially gained momentum following World War II with “more than 65 percent of the current career services centers being established between 1947 and 1960” (Angell, Carretta, Collins, & Ratcliffe, 2006, p. 84). Moreover, contemporary CD offices at institutions of higher education, also known as career centers, offer several valuable resources for college students, including information about career paths, preparation of job search materials (e.g., resumes and cover letters), development of interviewing skills, opportunities for experiential learning (e.g., internships), and, most notably, assistance with selection of an academic major (Schaub, 2012).

The selection of an academic major has been described as one of the most crucial decisions in a student’s college career (Workman, 2015). Due to the connection between

the selection of an academic major and the ultimate career path, there is a need to examine students' experiences of being undecided about an academic major. Researchers have been studying college students who are uncommitted to academic majors or career directions for approximately 90 years (Gordon & Steele, 2015). Unfortunately, while considerable research has focused on understanding these undecided college students, there is a lack of studies charting the experience of being undecided for Latino/a college students (Gordon & Steele, 2015; Risco & Duffy, 2010). This lack of research is alarming, since the Latino/a population has become the largest minority community in the United States; moreover, the number of Latinos/as attending institutions of higher education has increased throughout the past several decades (Clark, Ponjuan, Orrock, Wilson, & Flores, 2013; National Center for Education Statistics, 2011).

When taking into consideration the unique context of Latino/a major-changers and the growing number of Latino/a students attending institutions of higher education, it is timely to examine this research problem from the framework of HRD. Ultimately, this study contributes to the literature on undecided Latino/a college students' CD. This chapter starts with a brief background of the study and the problem statements. This is followed by the research purpose and question, as well as theoretical and conceptual frameworks guiding this research effort.

Background of the Study

According to Winston (2003), career decision making is an important developmental task faced by traditional-age college students (i.e., ages 18 to 24). In fact,

one of the primary reasons for attending institutions of higher education is to prepare for a career (Orndorff & Herr, 1996). However, researchers have suggested that 20% to 50% of all incoming college students are undecided regarding majors and careers (Buyarski, 2009). Gordon (2007) defined *undecided* college students as those who enter institutions of higher education with a lack of academic major choice or those who have decided on a major but either doubt their decision or remain undecided regarding a career path. Other common terms used to describe the undecided student population include *undeclared* and *exploratory* (Gordon, 2007).

In addition to those students who begin college as undecided, approximately 75% of all college students change academic majors before they graduate (Gordon & Steele, 2015). Gordon (2007) coined the term *major-changer* to describe those students who enter college decided about their academic majors but then change their minds. The large percentage of college students who change academic majors (75%) is important to note due to a major's potential impact on career decision making. According to Buyarski (2009), students often assume that their academic major will lead directly to their career path. Therefore, the selection of an academic major has been described as a crucial career decision (Workman, 2015). St. John (2000) captured this notion when he said, "There is, perhaps, no college decision that is more thought-provoking, gut-wrenching and rest-of-your-life oriented—or disoriented—than the choice of a major" (p. 22). Since the number of major-changers on college campuses is substantial, it is imperative that educators assist these students with the selection of academic majors as they invest in CD throughout the college experience.

A common tool or intervention for assisting undecided students in selecting academic majors is career advising. According to Gordon (2006), career advising aids students in clarifying how their values, interests, personality, and skills may forecast potential success in majors and careers, as well as how to form goals accordingly. In other words, career advisors assist college students in gathering information in order to engage in career planning and exploration. As such, career advising is primarily developmental in nature and draws from the fundamental tenets of HRD, including the holistic view of an individual, an emphasis on how internal and external environments affect behavior, and an understanding of how individuals connect to the host organizational system (e.g., an institution of higher education; Swanson & Holton, 2009). Specifically, career advising pulls from the core HRD framework of CD by providing college students with tools and advisement to ensure that they grow and progress in their career paths (Swanson & Holton, 2009).

Problems may arise when career advisors do not take into account how various types of students may experience the phenomenon of being undecided about an academic major. For instance, an advisor who attempts to help Latino/a college students with the selection of an academic major should understand what the experience of being undecided is like for Latino/a college students. Understanding this phenomenon through the eyes of students who have experienced it can be especially important if career advisors are racially and ethnically different from the students whom they serve (Gordon, 2007).

Problems of the Study

Four problems drove the purpose of this study. First, even though the representation of Latinos/as in the CD literature has increased from 5% of research participants in 1990 to 9% in 2007 (Wells, Delgado-Romero, & Shelton, 2010), this increase is not proportional to the increased representation of Latinos/as in colleges or universities in the United States. For instance, in 2014, 35% of Latinos/as ages 18 to 24 were enrolled in college, up from 22% in 1993, resulting in a 13% increase to 2.3 million in 2014 (Pew Research Center, 2015). Yet, there is a gap in CD research as it relates to the Latino/a student population.

Second, Latino/a student enrollment in colleges and universities is projected to increase by 46% from 2009 to 2020 (National Center for Education Statistics, 2011); however, Latinos/as continue to lag behind other student populations in degree completion (Pew Research Center, 2015). For instance, as of 2014, only 15% of Latinos/as ages 25 to 29 had a baccalaureate, compared to 41% of Whites, 22% of African Americans, and 63% of Asian Americans in the same age group (Pew Research Center, 2015). Clark et al. (2013) reported that the college dropout rate for Latinos/as (19.9% for males and 16.7% for females) was higher than that of other racial and ethnic groups.

Third, there is a shortage of research related to Latino/a college students who are undecided about their academic major. “The lack of research on racial and ethnic students who are undecided makes it difficult to understand who they are, their reasons

for indecision, and specific ways to help them make educational and career decisions” (Gordon & Steele, 2015, p. 125).

Fourth, since career advising has the potential to affect CD in undecided Latino/a college students, career advisors must understand the experience of indecision in this specific student population.

Students often believe that an academic major leads directly to a career; however, an academic major can lead to many career options and a single career path may be pursued from many majors (Buyarski, 2009). Consequently, students may be limited in understanding the relationship between an academic major and career aspirations, contributing to their indecision (20% to 50% of incoming college students are undecided and 75% of all students change academic majors; Gordon & Steele, 2015). Gordon (2007) maintained that these students often possess a sense of choice anxiety that may impede their decision-making process regarding an academic major; they might also lack a clear sense of career identity and often lack career maturity.

Gordon (1998, 2006, 2007) identified variables that contribute to academic major indecision: personality traits, psychological factors and problems, avoidance behavior, anxiety, decision making, social attitudes, risk taking, and cross-cultural differences. The result is a mosaic of undecided student subtypes, categories of career indecision, and separate groups of undecided college students.

There is also a potential interplay among multiple layers of student identity. For instance, through a qualitative ethnographic study of Latino business students, Gross (2004) found a possible intersection between CD and cultural identity development

among racial and ethnic minority students. Results of Gross's (2004) study suggested that Latino/a college students face unique challenges, such as stereotype, prejudice, and cultural norms, that affect their selection of an academic major, as well as their career decision-making process.

Gordon (2007) warned that, when advisors are culturally different from their students, the advisors may inadvertently ignore the potential role of the students' identities in the major selection process. It is imperative for career advisors to understand these differences and the complex problems that arise when attempting to provide sound career advising for undecided Latino/a students. Overall, it is important to understand the essence of being undecided about an academic major for Latino/a college students in order to assist them with their CD through the selection of a major.

Purpose and Research Question

The primary purpose of this study was to explore the experience of being undecided about academic majors among Latino/a college students who were changing academic majors (herein, major-changers). Findings from this study will provide fresh insights for career advisors wishing to assist this student population. The following research question guided this study: *What is the lived experience of being undecided about an academic major for Latino/a college students at an institution of higher education?*

Significance of the Study

CD is important to the field of HRD (McDonald & Hite, 2005). The problems described above necessitate an inspection of the CD experiences for Latinos/as at

institutions of higher education. This study adds to the HRD literature by providing information on Latino/a CD, focusing on Latino/a college students who experience indecision about an academic major. This study is significant for three reasons.

First, this study contributes to the literature on racial and ethnic minority CD. A multitude of CD theories and models exist (Egan et al., 2006). Many CD theories were developed by studying White affluent college-bound males (Gross, 2004). Yet, the CD process is different for Latinos/as as they experience gender and cultural issues, educational issues, and family issues affecting the CD process (Gross, 2004). Findings from this study can heighten understanding of CD for this specific population.

Second, there is a lack of research on racial and ethnic college students who are undecided about their academic majors (Gordon & Steele, 2015). As a result, practitioners lack understanding about who these students are, why they experience indecision, and how to help them make career decisions (Gordon & Steele, 2015). From an HRD perspective, CD may be viewed as focusing on the individual through a counseling or programmatic framework (Egan et al., 2006). Thus, findings from this study may influence CD initiatives in higher education, specifically for undecided Latino/a college students.

Third, this study contributes to literature that integrates HRD and higher education. Traditionally, HRD and CD research has focused on employees, companies, and the workplace, with an emphasis on adult CD and progression through adult work roles (Swanson & Holton, 2009). Yet, there is value in CD affirming and guiding individuals through any career transition, broadly defined (McDonald & Hite, 2005). If

viewed through the context of working with students in higher education, HRD has the potential to inform how educators serve college students who are in transition between academic majors and career choices.

Overview of Theoretical and Conceptual Frameworks

Three theories are relevant to this study: (a) Super's (1957) life-span, life-space theory; (b) Lent, Brown, and Hackett's (1994) social cognitive career theory (SCCT); and (c) Chickering and Reisser's (1993) vectors theory. An overview of each of these theories is present below, including how the theory relates to this study.

Super's Life-Span, Life-Space Theory

Super (1957) postulated that CD is a life-long process affected by both societal factors and personal factors. Within the life-span, life-space theory, CD is viewed as progressing through five sequential developmental stages: growth, exploration, establishment, maintenance, and disengagement. In the context of higher education, the exploration stage may be considered most relevant to this study because many traditional-age college students fall within the age range associated with this stage (i.e., ages 14-24). Through exploration, college students investigate academic majors and career options, gain awareness of personal interests and abilities, and develop skills needed to enter a specific career (Evans, 2003).

Central to Super's theory is the concept of career maturity, which is one's readiness to engage in the developmental tasks associated with one's stage level (Niles & Hutchison, 2009). Another central component of this theory is self-concept or self-understanding. According to Super (1957), *self-concept* refers to one's image of self in a

role, position, or situation. However, Gross (2004) warned that foundational CD theories that focus on exploration, including Super's theory, were often developed by studying primarily White affluent college-bound males. These theories do not take into consideration how one's race or ethnicity may affect CD. Therefore, it would be prudent to consider social-related theories in addition to developmental theories because social influences (e.g., family, racial stereotype, and gender bias) affect career decisions made by many racial and ethnic minority college students (Gross, 2004). For this reason, SCCT was also used to frame this study.

Social Cognitive Career Theory

Developed by Lent et al. (1994), SCCT may be viewed as complementary to developmental theories such as Super's theory. According to Niles and Hutchison (2009), SCCT draws greatly from Bandura's (1986) social cognitive theory. Central to this theory is self-efficacy, or one's expectations about the ability to complete a task effectively (Niles & Hutchison, 2009). According to Bandura (1986), self-efficacy influences a person's willingness to engage in specific tasks and behaviors. In other words, people are more likely to participate in a task if they believe that they will succeed, regardless of the barriers that they might encounter (Niles & Hutchison, 2009). Drawing from Bandura's influence, SCCT describes the "complex relationship among self-efficacy beliefs, outcome expectations, and personal goals in the career decision-making process" (Niles & Hutchison, 2009, p. 85). Within SCCT, self-efficacy denotes one's beliefs about the ability to participate in activities necessary to achieve a specific outcome, such as choosing an academic major (Niles, Erford, Hunt, & Watts, 1997).

Ultimately, SCCT suggests that people are less likely to transform their career interests into goals and actions when their self-efficacy is negatively affected by perceived barriers to success (Lent & Brown, 1996).

In the context of major selection, the “interaction of these three factors [self-efficacy, outcome expectations, and personal goals] informs a student’s beliefs about his or her ability to play a central role in his or her own academic and career decision-making process” (Niles & Hutchison, 2009, p. 85). This concept is especially relevant to undecided Latino/a students, since many of these students possess a low sense of self-efficacy (Arbona, 1995). Moreover, barriers such as economic inequalities (Clark et al., 2013), cultural norms (Fouad, 1995), gender-related barriers (Risco & Duffy, 2010), and lack of parental support (Corkin, Arbona, Coleman, & Ramirez, 2008) have the potential to influence the selection of an academic major by undecided Latino/a college students. Overall, SCCT provides a framework to examine how self-efficacy and barriers might interplay in students who are engaged in various stages of Super’s theory.

Chickering and Reisser’s Vectors Theory

Chickering and Reisser’s (1993) vectors theory has deeply influenced research on college student development, including CD (Pascarella & Terenzini, 2005). According to Chickering and Reisser (1993), college students move through seven vectors of development that contribute to identity creation: developing competence, managing emotions, moving through autonomy toward interdependence, developing mature interpersonal relationships, establishing identity, developing purpose, and developing integrity (Chickering & Reisser, 1993).

Within the context of applying Chickering and Reisser's theory to CD, Galilee-Belfer (2012) found that many programs and services targeted toward undecided college students focus on developmental outcomes associated only with Vector 6 (developing purpose). According to her research, services that focus on helping students to explore their purpose assume that undecided college students possess the academic sophistication to engage in that vector; however, undecided students are often uninformed regarding how academic majors work, what employers value, and how to make informed career decisions (Galilee-Belfer, 2012). Researchers have also found that Latino/a college students face unique challenges within the vectors, such as social influences (e.g., family, friends, and stereotypes) that affect their ability to navigate questions about identity and purpose (Risco & Duffy, 2010). Chickering and Reisser's theory advanced this research topic by adding a specific foundation upon which Super's theory and SCCT could be applied to undecided Latino/a college students.

Delimitations

This study was bounded to the state of Texas. It is important to note that Texas is heavily populated by Latinos/as, who constitute 39% of the state's population (Pew Research Center, 2016b). Texas ranks third in the United States in Latinos/as as a percentage of its population and second in the United States for total Latino/a population in a state (Pew Research Center, 2016b). Moreover, 87% of the Latinos/as in Texas identify as being of Mexican origin (Pew Research Center, 2016b). Approximately 50% of all Latino/a college students are the first in their family to go to college (first-generation college students; Santiago, 2011). This study was delimited to Latino/a

college students, not examining other racial and ethnic minority students. This delimitation does not imply that other student experiences of being undecided about an academic major hold no value. This study also focused on Latino/a students who were major-changers, instead of all categories in the undecided spectrum (e.g., undecided upper-class students, undecided older students). Participants were recruited from a public, 4-year, Predominantly White Institution (PWI) of higher education in Texas and did not involve participants from other geographic areas.

Organization of the Dissertation

This dissertation is organized into five chapters. Chapter I contains an overview of the study, identification of the problem and research question, a description of the significance of the study, and a description of the theoretical and conceptual frameworks applied in the study. Chapter II contains a review of relevant literature in order to develop understanding of undecided Latino/a college students and factors that affect their selection of academic major, as well as college student development theory and CD theory used to frame the study. Chapter III contains a description of the research methodology, research design, participant selection, data collection, and data analysis procedures used in the study. Chapter IV contains the presentation of the findings of the study. Chapter V contains a report of the analysis of the findings, conclusions, and recommendations for future research.

CHAPTER II

LITERATURE REVIEW

The purpose of this chapter is to review relevant literature in order to develop an understanding of undecided Latino/a college students and factors that affect their selection of an academic major. This review is organized into four sections. The first section is a brief history of career development in the field of HRD. The second section is a brief history of CD services in higher education, including the differences between career advising and career counseling. The third section focuses on information about undecided Latino/a college students, including definitions of *undecided* and *Latino/a*, and addresses common characteristics of undecided students and influences on major and career selection. The fourth section focuses on college student development theory and CD theory, with specific focus on Super's (1957) life-span, life-space theory; the SCCT by Lent et al. (1994); and Chickering and Reisser's (1993) vectors theory, which are used as foundations for this study.

Career Development in Human Resource Development

McLagan (1989) described HRD as “the integrated use of training and development, career development, and organizational development to improve individual and organizational effectiveness” (p. 7). Inherent in this definition is the notion that CD is one of the three main areas of practice for HRD; however, the study of CD tends to be overshadowed by research focused on other aspects of HRD, such as OD and T&D (McDonald & Hite, 2005). Swanson and Holton (2009) noted that CD has steadily waned in its impact on HRD, with it “functioning as an extension of the

development component of T&D” (p. 331). In essence, “CD has fallen off in importance in HRD because of the failure to ask questions, ascertain outcomes, and make links between HRD- and CD-related theories, research, and practice” (Egan et al., 2006, p. 469). Swanson and Holton (2009) described CD as being slighted as a contributor to HRD. Thus, it is reasonable to conclude, in agreement with Egan et al. (2006), that CD is vital in HRD and is worthy of more consideration in the HRD literature.

Cummings and Worley (2005) defined CD as “helping individuals achieve their career objectives. It follows closely from career planning and includes organizational practices that help employees implement those plans” (p. 418). Traditionally, CD has been described as a relationship between employees and HRD practitioners, within the context of the workplace (Egan et al., 2006). Yet, with a growing emphasis on preparing college students to enter careers post graduation (National Association of Colleges and Employers, 2016), CD initiatives are poised to be thrust into the forefront of HRD as it relates to higher education. This is especially salient when taking into consideration Cummings and Worley’s (2005) definition of CD. In the context of higher education, schools are charged with developing organizational practices that help college students to achieve their academic major goals and career goals.

Due to the connection between the selection of an academic major and an ultimate career path, there is a need to examine students’ experiences of being undecided about their academic majors. When taking into consideration the unique context of Latino/a major-changers and the growing number of Latino/a students attending

institutions of higher education, it is timely to examine this research problem from the framework of HRD.

Career Development in Higher Education

Gordon (2006) wrote that “all students need career advising, even those who enter college already decided on an academic major” (p. 5). Historically, career advising evolved from the disciplines of academic advising and career counseling (Hughey & Hughey, 2009). Academic advising focuses on college students’ successful completion of academic requirements for graduation, as outlined by institutional expectations (Gordon, 2006). Conversely, career counseling focuses on assisting students with career self-assessment, as well as counseling students who experience stressful academic and career-related situations and coping strategies (Gordon, 2006). However, with its focus on student and CD, career advising contributes to college students’ personal and professional growth from a truly developmental lens. The similarities and differences between career advising and career counseling are discussed in a later section of the literature review. The first step is to develop a better understanding of the history and purpose of CD services in American higher education, including a specific focus on career advising.

History and Evolution of Career Development Services

Since the 1940s, career services offices at institutions of higher education have experienced considerable transformations to broaden the scope of services offered to college students (Schaub, 2012). Contemporary career services offices, also known as career centers, offer several valuable resources for college students, including

information about various career paths, preparation of job search materials (e.g., resumes and cover letters), development of interviewing skills, opportunities for experiential learning (e.g., internships), and, most notably, assistance with the selection of an academic major (Dungy, 2003; Schaub, 2012). Incorporation of comprehensive CD services has not always been the norm in career services in the United States.

The first instance of institutions providing assistance with career services occurred in the 1800s (Niles & Harris-Bowlsbey, 2009). The pinnacle of career services in American higher education followed World War II (Angell et al., 2006). According to Angell et al. (2006), “More than 65 percent of the current career services centers were established between 1947 and 1960” (p. 84).

During the 1940s and 1950s, career centers operated under a placement philosophy in which the primary objective was simply to connect students with jobs and place them with companies after graduation (Schaub, 2012). Then, career centers shifted between the 1960s and 1980s to teaching students specific skill sets, such as job search skills and strategies (Schaub, 2012). At that point, the goal was to provide students with tools to advance their own career goals. Only recently did the philosophy shift again to include a more holistic approach regarding CD. During the 1990s and 2000s, career centers adopted the role of comprehensive CD sites where students could take advantage of services such as outreach programs, career fairs, networking opportunities, and on-campus and online recruiting opportunities (Schaub, 2012). Orndorff and Herr (1996) reported that one of the primary needs sought by college students has been assistance with selection of academic majors. As a result of this philosophical shift, career centers

began to employ career advisors and career counselors to assist students who experience career uncertainty and to help them with the exploration and selection of academic majors and careers (Jurgens, 2000). There is a misunderstanding about the roles of career advisors and career counselors due to similarities and overlap between the professions. The following section includes definitions of both occupations.

“Career Advising” Defined

Career advising and *career counseling* are related but separate concepts. According to Gordon (2006), career advising “helps students understand how their personal interests, abilities, and values might predict success in the academic and career fields they are considering and how to form their academic and career goals accordingly” (p. 12). Hughey and Hughey (2009) defined career advising as a “dynamic teaching and learning process intended to contribute to students’ development” (p. 7). In other words, career advisors assist students in gathering information in order to participate in career and major exploration, planning, and development. Essentially, career advisors, also referred to as CD specialists in the literature, are educators who do not necessarily delve into psychologically related issues when assisting students with CD (Dungy, 2003).

“Career Counseling” Defined

Hartung and Niles (2000) defined *career counseling* as assisting students to “self-reflect, restructure beliefs, mature and deepen their personalities, and answer the question ‘Who am I?’” (p. 4). Career counselors develop formal counseling relationships with college students in which they establish rapport, assist with coping strategies, and

offer career interventions such as stress reduction and management of indecisiveness (Niles & Harris-Bowlsbey, 2009). Herr, Cramer, and Niles (2004) defined career counseling as a

dynamic and collaborative relationship, focused on identifying and acting on the counselee's goals, in which the counselor employs a repertoire of diverse techniques and processes, to help bring about self-understanding, understanding of career concerns . . . as well as informed decision making. (p. 42)

Career counselors typically hold advanced degrees in counseling psychology; moreover, they have often completed graduate coursework related to assessment practices (Dungy, 2003). In other words, career counselors must have a master's-level education, including counseling curriculum and core competencies, such as counseling techniques, assessment methods, and problem resolution skills (Gordon, 2006).

In summary, even though there is similarity and overlap between the two concepts, career advising may be viewed as more educational and developmental, whereas career counseling is more psychological in nature (Hughey & Hughey, 2009). Both of these approaches to CD have a place in higher education but they view college students from slightly different frameworks. On the one hand, the primary outcome for career advising is to educate college students regarding academic major options and career paths. Inherent in this approach is the assumption that college students possess the capacity to make informed decisions about their academic futures by integrating information about self, academic options, and career options (Gordon, 2006). On the other hand, career counselors can be viewed as experts who help students to interpret

assessment data and delve into conscious and subconscious factors that influence the decision-making process from a therapeutic lens (Niles & Harris-Bowlsbey, 2009). This difference in approach hints at the difference between students who identify as *undecided* and those who are *indecisive*, a concept that is addressed next.

Undecided Latino/a College Students

Since the 1960s and 1970s, considerable research has focused on studying undecided college students, including theories pertinent to undecided college students (Buyarski, 2009), undecided student types (Gordon, 2007; Gordon & Steele, 2015), and career decidedness subtypes (Gordon, 1998). There has been rising interest in the study of CD in racial and ethnic minorities (Gordon & Steele, 2015). Nonetheless, empirical research is lacking regarding the specific study of undecided racial and ethnic minority college students (Gordon & Steele, 2015; Risco & Duffy, 2010).

Risco and Duffy (2010) suggested the need for research focused on CD of Latina/o college students and their career decision-making processes. They conducted a quantitative study ($N = 236$) of incoming Latino/a college students to examine their career decidedness, values, and career selection comfort.

Gross (2004) posited that CD literature is lacking in theoretical frameworks that are applicable to racial and ethnic minorities. The author argued that social context is extremely important when examining Latino/a populations, especially due to the array of Latino/a groups (e.g., Hispanic, Chicano, Mexican Americans, Cuban Americans, Dominican Americans, Puerto Ricans). Foundational CD theories focus on the discovery of self and exploring careers but the dimension of social influence is missing.

Both of those studies underpin the need to understand the experience of being undecided about academic majors for Latino/a college students. Taking such a viewpoint would require one to possess a solid understanding of the traditional definitions of undecided college students, as well as a consistent definition of the term *Latino/a*. Therefore, the second section of this literature review focuses on information about undecided Latino/a college students, including defining *undecided* and *Latino/a*, as well as addressing influences on academic major selection and common characteristics of undecided students.

“Undecided” Defined

Career undecided and *career indecisive* are related yet separate concepts that are easily misunderstood. Buyarski (2009) emphasized this point: “It is critically important that advisors are able to identify those students who are undecided versus those who are experiencing indecision, thereby requiring more counseling-based interventions” (p. 224). In essence, college students can be undecided about their academic majors without being indecisive (Osipow, 1999). The key is to understand the difference between the two concepts (i.e., undecided versus indecisive) and to recognize these characteristics in students.

Gordon and Steele (2015) defined *undecided* students as those who enter college lacking an academic major or those who have selected a major and either doubt their decision or remain undecided regarding a career path. This is important to note because deciding on an academic major does not necessarily equate to being decided on a career (Bertram, 1996). Researchers have suggested that many students with declared majors

actually still demonstrate indecision regarding career paths (Bertram, 1996; Buyarski, 2009; Steele, 2003). In fact, declaring a major does not in itself solve uncertainty and can actually lead to more questions for the student (Bertram, 1996). Nonetheless, undecided students may be viewed as those who are unready or unwilling to make educational decisions related to academic majors, which may lead to distress (Steele & McDonald, 2000).

As opposed to the term undecided, *indecisiveness* is a “negative, pervasive, and chronic trait that generalizes across several decision-making domains” (Daniels, Stewart, Stupnisky, Perry, & Lo Verso, 2011, p. 411). Indecisive individuals often display undecided behavior throughout many decision points during the life span (Osipow, 1999). Ultimately, indecisive behavior potentially stems from psychological issues that lead to college students being unable to make decisions (Buyarski, 2009). Career indecisive students may require additional assistance from trained psychological professionals, such as career counselors, whereas career undecided students fall within the scope of career advising.

“Latino/a” Defined

One of the most complicated problems in studying Latino/a college students is determining how to define them. Throughout the literature, multiple terms are used to describe this student demographic due to heterogeneity among subgroups of the Latino/a population. For instance, researchers have used terms such as *Latino/a*, *Hispanic*, *Chicano*, *Mexican-American*, *Puerto Rican*, *Cuban-American*, and *Dominican-*

American, to name a few (Gross, 2004). Rodriguez (2004) captured the essence of this difficulty:

The term “Hispanic” is often used interchangeably with the term “Latino.” The term “Hispanic” was introduced into the English language and into the 1970 census by government officials who were searching for a generic term that would include all who came from, or who had parents who came from, Spanish-speaking countries. It is, therefore, an English-language term that is not generally used in Spanish-speaking countries. The term “Latino,” on the other hand, is a Spanish-language term that has increased in usage since the introduction of the term Hispanic. Some Latinos/Hispanics feel strongly about which term they prefer. Some reject both terms, and insist they should be known by their national origin; still others use all terms and vary their usage depending on context. (para. 8)

Gamboa and Vasquez (2006) added clarification to this issue by stating that the Hispanic population is not a racial group. Hispanics do not share a common language or culture. Instead, those who identify as Hispanic or Latino/a can trace their origins to many countries with various cultures, including the United States. Therefore, it is imperative for students to define themselves because the ethnic composition of Latino/a communities can vary by institutional campus and region. While the term *Latino/a* was chosen for this study, participants were allowed to self-identify as well.

Latinos/as in higher education. According to Gamboa and Vasquez (2006), the Latino/a population has become the largest racial and ethnic minority community in the

United States. The rate of increase in college enrollment among Latino/a students is the highest in the nation, even though the total number of Latino/a students enrolled in institutions of higher education is still lower than that of White or African American students (Gamboa & Vasquez, 2006; National Center for Education Statistics, 2011). While more Latinos/as are entering college than in the past, they lag behind other student groups educationally in terms of completion of baccalaureate degrees (Nora & Crisp, 2009). As a result, improving access by and success of Latino/a college students at all postsecondary levels has been declared a national priority by two U.S. presidential administrations. However there is a lack of understanding of the unique needs of Latino/a college students (Nora & Crisp, 2009).

Barriers to college access. Nora and Crisp (2009) identified several barriers to college access by Latinos/as: a high rate of high school dropout behavior; lower academic preparation for college as compared to White students; economic, cultural, and social barriers (e.g., Latinos/as are more likely than Whites to be first-generation college students and/or to come from low-income homes); increasing tuition costs and a lack of financial aid; lower academic self-efficacy as compared to White students; gender-specific barriers between Latinos and Latinas; and a heightened need for parental support and encouragement (Nora & Crisp, 2009).

Latinos/as are disproportionately represented in 2-year colleges, which are common entry points to 4-year universities (Nora & Crisp, 2009). This is important to note because amassing too many credit hours or establishing a grade point average

(GPA) at another institution can have a potential negative impact on a student's ability to change academic majors after transfer (Gordon & Steele, 2015).

Nora and Crisp (2009) suggested that positive academic experiences during the first year of college improve Latino/a students' commitments to earning a degree. Yet, if Latino/a students do not integrate academically, they are less likely to complete the degree (Nora & Crisp, 2009). In other words, there is a potential educational barrier for Latino/a students who experience indecision because of their lack of academic integration into a major.

Gender and cultural issues. Even though the number of Latinos/as entering college is increasing, Clark et al. (2013) found that the proportional representation of Latinos (males) has actually decreased relative to Latinas (females). Not only are fewer Latinos entering higher education than Latinas; those Latinos who enter are more likely to drop out than to graduate. Clark et al. (2013) attributed this phenomenon to social pressures for Latinos to enter the workforce rather than enter higher education.

Both Latinos and Latinas experience economic inequalities and cultural norms that influence the decision to persist in higher education. These cultural values often include *allocentrism* (an individual's goals are subordinate to group goals), *familismo* (a strong affiliation with the nuclear or extended family), *simpatia* (the need to make relationships pleasant and smooth), *respeto* (appropriate deference paid to an individual's gender and generation), and *machismo* or maleness (standards of behavior held for men and women; Fouad, 1995). Each of these norms has the potential to

influence the decision to enter higher education as well as the major decision-making process for undecided Latino/a college students.

Educational and family issues. Gross (2004) suggested that Latino/a students are historically bound by barriers to educational success. For instance, many Latino/a college students lag behind their White, Asian, and African American counterparts in test scores, college completion, and dropout rates (Gamboa & Vasquez, 2006).

Latino/a students may face other barriers, such as being first-generation college students (i.e., students whose parents have not attended an institution of higher education). According to Hottinger and Rose (2006), first-generation college students have limited role models to guide and mentor them through the higher education experience. They are more likely than their non-first-generation peers to be low-income, enrolled part time, and focused on expediting completion of coursework (Hottinger & Rose, 2006). Gamboa and Vasquez (2006) found that Latino/a students who also identified as first-generation students felt heightened pressure to represent their families, complete the college degree, and obtain a career that could improve the family's condition.

Ultimately, there is the potential for Latino/a college students to experience barriers to educational success while simultaneously striving to correct family struggles, improve finances, and fulfill family and cultural obligations. The combination of barriers and pressure alone would be enough to create issues for Latino/a students; the situation can become even more challenging if the student is undecided about an academic major.

Ortiz and Hinojosa (2010) posited that the number of Latino/a college students who self-identify as undocumented is growing. These students face an added layer of complexity as they attempt to navigate legal restraints that can impede their CD process. Undocumented college students face the reality that they may never have the opportunity to pursue their chosen career path, based on legal access (Ortiz & Hinojosa, 2010).

Latinos/as in career literature. In an analysis of career research from 1990 to 2007, Wells et al. (2010) found that the representation of Latinos/as had increased in the CD literature, from 5% of research participants in 1990-1999 to 9% in 2000-2007. However, even though representation of Latinos/as has increased, this percentage is still not proportional to the representation of Latinos/as in colleges and universities in the United States (Wells et al., 2010). Multiple researchers have echoed this notion and maintain that there is a lack of research on the career behavior of racial and ethnic minorities (Bullington & Arbona, 2001; Gordon & Steele, 2015; Gross, 2004; Risco & Duffy, 2010). Therefore, this study is an attempt to fill this gap by examining the experience of Latino/a college students who are undecided about an academic major.

Influences on Major and Career Selection

Considerable time and attention has been spent by researchers to understand the influences on college students' selection of academic major and career (Soria & Stebleton, 2013). The selection of academic major can have lasting implications on student satisfaction and sense of belonging in college, career opportunities after graduation, and salary potential (Soria & Stebleton, 2013). Therefore, it is important to identify influences on academic major selection when studying undecided Latino/a

students. The following is an overview of general influences, as well as specific influences, that influence the Latino/a student population.

General influences. Beggs, Bantham, and Taylor (2008) conducted a large-scale mixed-methods study (i.e., a means-end qualitative study and a quantitative survey with $N = 852$) in order to identify the factors that college students found important when selecting an academic major. Results of the study indicated four primary categories of factors influencing a college student's major and career choices: sources of information and influence (parental or familial influence vs. genuine interest in the subject), job characteristics (extrinsic vs. intrinsic rewards of a job), fit and interest in the subject (the match between student aptitude and personality with the subject matter), and characteristics of major/degree (e.g., faculty reputation, ease of earning degree, course variety). Based on the results of the study, the authors recommended that students delay selection of a major until they are developmentally ready, advisors should clearly communicate major requirements and career opportunities to students, advisors should evaluate how they are communicating this information to students, parents should be included in the decision-making process, and each institution should take into consideration its unique qualities when assisting these students.

Likewise, in an earlier quantitative study ($N = 169$), Guerra and Braungart-Rieker (1999) examined factors that influenced career indecision in college students. Results of the study aligned with the four primary categories found by Beggs et al. (2008) but placed additional emphasis on the impact of familial influence and identity development on academic major selection.

Workman (2015) used a qualitative, phenomenological approach to examine influences on exploratory students' selection of an academic major. Results of the study reinforced both positive and negative roles of parental influence in the selection of a major. For example, when parents were supportive of a student's major and career decision-making process, students reported positive feelings about parental roles. On the other hand, when students perceived being pressured by their parents to make decisions, they reported negative feelings about parental roles. Workman concluded that the influence of parents on the major and career decision-making process is complex and may vary from student to student. This conclusion was also made by Walmsley, Wilson, and Morgan (2010), who conducted a qualitative study of upper-class undecided college students who switched academic majors. However, that study placed emphasis on the importance of influences from peers and faculty, which mirrored the complexity found in familial influence.

Comparatively, Carduner, Padak, and Reynolds (2011) posited that factors such as ability, interests, earning potential, work environment, and employability may influence the selection of an academic major. This is important to note, since undecided students initially select an academic major and then change their majors for various reasons. There simply is not one primary motivating factor that influences the majority of undecided college students. This notion is supported by Malgwi, Howe, and Burnaby (2005), who conducted a quantitative study ($N = 788$) of incoming freshman business students and undecided business students who had changed majors. The researchers found that factors such as interest, career advancement opportunities, and earnings

potential ranked higher for business students than did influences such as family. Thus, a multitude of factors can influence undecided college students' academic major decision-making processes.

Influences specific to Latinos/as. None of the above-cited studies specifically examined how race and/or ethnicity may interplay with factors that influence the selection of academic major. Cultural norms and values are extremely important considerations when examining Latino/a CD. Research suggests that Latino/a students are similar to White students in terms of career ambitions and career decision-making skills (Dickson, 2010). However, a qualitative study by Bullington and Arbona (2001) showed that ethnic and family contexts were related differently to Latino/a student CD than to those of their White counterparts. Results indicated that Latino/a students were motivated in their academic and career pursuits by high expectations set by their parents, many of whom had not attended institutions of higher education. The authors found that racial and ethnic minority students face the task of integrating ethnic identity issues (e.g., negative images of their ethnic group in society) into their career self-concept. This notion was supported in a quantitative study ($N = 147$, including 71 Mexican American participants and 76 non-Hispanic White participants) by Caldera, Robitschek, Frame, and Pannell (2003), who compared Mexican American and Non-Hispanic White college women regarding factors that influenced their commitment to career choice. They found that Latina students were more motivated to surpass their parents than to emulate them, especially given that the majority of the Latina students in the study were first-generation college students. In other words, the Latina students experienced added

pressure to make correct academic major and career decisions, succeed, and surpass the educational and occupational levels of their parents.

According to Fisher and Padmawidjaja (1999), the majority of studies exploring parental influences on career development have been conducted with White students; however, types of parental factors may differ among cultural groups. The authors conducted a qualitative study to explore the impact of parents on CD in African American and Mexican American college students. Results of the study indicated that parental encouragement was the primary influence on CD. Encouragement included four subcategories: (a) availability (accessibility and willingness of parents to help), (b) guidance and support (parents providing advice on educational and career topics), (c) acceptance (parents' willingness to support the students' decisions), and (d) autonomy (parents providing freedom for students to make decisions). Results also suggested that racial and ethnic minority students might feel an added responsibility to obtain career statuses above those of their parents. The authors concluded that there may be a strong relationship between parent availability and encouragement, and effective educational decision making in selection of an academic major among racial and ethnic minority students.

From a cultural perspective, Risco and Duffy (2010) found gender differences among Latino and Latina college students regarding their academic major and career decision making. The authors conducted a quantitative study ($N = 236$) of incoming Latino/a college students and compared genders to explore their career decidedness, work values, and career selection comfort. The results indicated that Latino (male)

students showed less career indecisiveness and viewed their career as more important to their identity than did Latina (female) students. When deciding on a career, Latinas placed more emphasis on their interests and making a difference than did Latinos. Instead, Latinos placed more emphasis on future earnings and working autonomously. Latinas were more likely to experience gender barriers such as sex discrimination or clash with family expectations regarding their major and career choices. This issue suggests a cultural disparity between Latina desires and social norms. All in all, Latina students were found to be more likely to experience indecision and find motivation in social and intrinsic values than Latino students. The authors concluded that gender differences found in the study emphasized the importance of understanding connections in identities when approaching racial and ethnic minority students.

Corkin et al. (2008) suggested that members of various ethnic groups may differ regarding the types of barriers that they face, which could influence academic major decision-making process. The authors performed a quantitative study ($N = 337$) of Puerto Rican college students and found that exploring career interests and gathering information about academic majors and careers may not be sufficient for all undecided Latino/a students during the decision-making process, especially due to parental pressures. The researchers identified four factors that significantly influenced academic major and career selection among Latino/a college students: lack of structure (i.e., lack of knowledge about how personal interests and skills relate to careers), lack of support (i.e., a need for more information about the working world), approach-avoidance (i.e., multiple career interests), and perceived barriers (i.e., obstacles in career decision

making such as lack of social support and low self-efficacy). Although lack of structure, lack of support, and approach-approach may coincide with results of studies focusing on White students, the notion of perceived barriers is important to point out. The authors suggested that barriers such as lack of parental support and low self-efficacy are especially relevant when discussing Latino/a students. These characteristics are discussed further in the section focusing on the characteristics and types of undecided students.

In a quantitative study ($N = 2,359$), Simpson (2001) used multinomial logit modeling to differentiate factors that influenced the selection of an academic major among racial groups, while controlling for sex or gender as a confounding variable. Simpson found that Latina (female) students were more likely than Latino (male) students to pursue health-related (e.g., biology, nursing), business (e.g., accounting, finance, management, marketing), or liberal arts majors (e.g., psychology, sociology, English, fine arts) than technical programs (e.g., engineering, mathematics, computer science). A student's math scores and the number of science courses taken during high school significantly influenced the choice of an academic major. For instance, Latinos/as were more likely to select technical majors when their high school mathematics scores were high or as the number of science courses completed in high school increased. Simpson also found that Latinos/as did not significantly differ from White students in their selection of academic majors. Simpson (2001) admittedly did not examine factors such as family influence or generational status, which may influence the selection of an academic major by Latino/a college students.

Through a qualitative study, Gross (2004) found a possible intersection between CD and cultural identity development in Latino/a college students. Results of the study suggested that Latino/a college students face unique challenges such as stereotype and prejudice when examining career options. Study participants discussed how norms in their cultural heritage had influenced their academic major and career decision making, especially when they opted to pursue career options that were counter to cultural norms. For instance, participants reported that they had experienced prejudice and stereotypes both on campus and in the workplace. These experiences came both from persons of other ethnicities and from those who shared the students' Latino/a heritage. On the one hand, participants experienced subtle racism, such as suggestions from non-Latinos/as that they had received internship offers based solely on being from ethnic and racial minorities, as well as overt racism such as name calling and negative treatment. On the other hand, the participants were criticized by other Latino/a students or family members as being "sellouts" for pursuing career options counter to cultural heritage norms. This concept has the potential to influence the characteristics of undecided Latino/a college students, including their career identity, career anxiety, and career self-efficacy.

Characteristics of Undecided Students

Several common characteristics of undecided students continue to emerge in the literature. For example, undecided college students often possess low career self-efficacy, high choice anxiety, career identity confusion, and low career maturity (Gordon, 2007; Gordon & Steele, 2015). Each of these concepts is discussed in the following sections.

Career self-efficacy. Research indicates that undecided students are more likely to have lower career self-efficacy than their peers who are decided (Bullock-Yowell, McConnell, & Schedin, 2014; Niles et al., 1997). In other words, undecided students may not be confident in their capacity to make decisions about an academic major. The notion of self-efficacy is central to Bandura's (1986) social cognitive theory, a foundational theory directly relevant to Latino/a students, which is discussed in the section on theory. Career self-efficacy is especially important when examining undecided Latino/a college students since many of these students experience barriers during their educational and vocational pursuits (Arbona, 1995). In essence, if an undecided Latino/a college student feels that academic and career barriers are too great, he or she may not feel empowered to make a selection regarding an academic major.

For many Latino/a students, going to college is about achieving the family's goals rather than simply being about the student (Gamboa & Vasquez, 2006). As a result, the decision regarding an academic major may not be the student's decision to make. Instead, the decision may be made collectively by the family. Fisher and Padmawidjaja (1999) concluded that parental expectations were driven by an aspiration to have one's children exceed one's own educational and vocational levels. The concept of career self-efficacy must be taken into consideration, along with the potential impact of culture on self-efficacy.

Choice anxiety. Research indicates that undecided students possess a sense of choice anxiety that may impede the decision-making process regarding an academic major (Daniels et al., 2011; Gordon & Steele, 2015; Steele, 2003). Undecided students

tend to be apprehensive about committing to a particular field of study or career path, resulting in increased stress levels. Berríos-Allison (2011) found that Latino/a college students were expected to be role models for their families and for other Latinos/as. As a result, undecided Latino/a students may feel pressure to select the correct academic major and succeed in school. Corkin et al. (2008) found that anxiety in Latino/a college students was positively associated with indecision. Essentially, increased anxiety can lead to increased indecision and increased indecision can lead to increased anxiety.

Career identity. The establishment of identity is a primary developmental task for college students (Astin, 1993). However, undecided students may lack a clear sense of career identity (Gordon & Steele, 2015). Basically, undecided students may not be able to define their interests, abilities, values, and goals clearly; moreover, they may be unable to draw connections between their identities and career options (Gordon & Steele, 2015). As a result, they may experience feelings of career identity confusion. This confusion can be especially challenging for undecided Latino/a college students.

Gross (2004) found an intersection between career and cultural identity in Latino/a college students. Bullington and Arbona (2001) maintained that Latino/a students deal with issues related to their membership in a racial and ethnic minority group, in addition to being engaged in CD tasks. As a result, Latino/a college students are required to establish multiple layers of identity simultaneously. If a Latino/a student also identifies as being a first-generation college student and/or undocumented, then the establishment of identity can be even more challenging. All in all, it is imperative to view undecided Latino/a college students from a multicultural perspective that takes into

consideration both individual and social influences (Gordon & Steele, 2015; Gross, 2004).

Career maturity. Undecided students often lack career maturity and are simply unready to make informed decisions related to selecting an academic major or career (Steele, 2003). The concept of career maturity is vital to Super's theory, which is discussed in the final section of this literature review. Gordon (2007) captured the issue of low career maturity by stating, "Students are often forced by institutions to make decisions at a time when they are not developmentally ready" (p. 35). In other words, many undecided college students are not prepared to engage in tasks such as self-assessment and career exploration. College students may lack awareness of the factors that are involved in choosing an academic major (Gordon & Steele, 2015). They may lack reliable information on which to make a decision. They may begin by making unrealistic decisions without taking into consideration their abilities, interests, and values (Gordon, 2007). For instance, a career immature person might select an academic major based solely on the recommendation by a parent or family member, without taking into consideration his or her interests and skill set related to the subject matter. As a result, undecided students may experience increased levels of anxiety and indecision.

Subtypes of Undecided Students

Gordon (1998) identified seven subtypes of undecided and decided students: "very decided, somewhat decided, unstable decided, tentatively undecided, developmentally undecided, seriously undecided, and chronically indecisive" (p. 392). *Very decided* students typically feel positive about their futures and believe that they

control their destinies, as well as the decision-making process (Buyarski, 2009; Gordon, 1998; Steele & McDonald, 2000). *Somewhat decided* students have doubts regarding their decisions and demonstrate high levels of anxiety and low levels of self-efficacy. *Unstable decided* students display goal instability, high anxiety, and low confidence in their performance; these students may also demonstrate uncertainty about academic major and career choices. *Tentatively undecided* students are content with themselves, similarly to very decided students, and may even show some sort of vocational direction; however, they have not decided on an academic major and believe that a decision will occur once they are ready. *Developmentally undecided* students typically have multiple interests and need to gather information about themselves and career options; they are most likely going through the normal process of establishing their career identities. Conversely, *seriously undecided* students possess low levels of career identity and limited knowledge of academic major options and career options. They might be seeking the one, perfect educational choice (i.e., academic major). *Chronically indecisive* students demonstrate indecisiveness rather than being undecided; these students may need career counseling instead of career advising, as indecisive behavior may indicate psychologically related issues (Daniels et al., 2011).

Subgroups of Undecided Students

The characteristics and subtypes of undecided students can also be found in subgroups inherent in the undecided college student population, including “entering first-year students, major-changers, undecided upper-class students, multicultural undecided students, undecided high-ability students, undecided student athletes, older

undecided students, underprepared undecided students, and undecided community college students” (Gordon & Steele, 2015, p. 102). It is important to note that students may belong to more than one subgroup simultaneously. For instance, a multicultural undecided student may also be an entering first-year student or major-changer. Since the majority of undecided students are in the categories of entering first-year or major-changer (Gordon & Steele, 2015), these two subgroups are described in detail below.

Entering first-year students. Gordon (2007) stated, “The largest and most obvious group [of undecided students] is the traditional-aged freshmen who enter college unable, unready, or unwilling to commit themselves to a specific academic direction” (p. 81). The most common undecided categories among these undecided entering first-year students are the *tentatively undecided* and the *developmentally undecided*; however, first-year students can be in all undecided categories (Gordon, 2007). Gordon (2007) suggested that these students are often the easiest for advisors to approach because the first step in advising them involves determining their specific areas of need. These students must explore a variety of academic major and career options and are best served through individual career advising, freshman seminar and career exploration courses, and academic information sessions (Gordon, 2007; Gordon & Steele, 2003; Hansen & Pedersen, 2012). Ultimately, the three primary career advising needs for *undecided entering first-year students* are engagement in exploration, assistance with decision-making skills, and clarification of self-conflicts during identity development (Buyarski, 2009). The developmental approach of career advising allows advisors to help undecided students to navigate self-conflict concerns such as disconnects between values and career

goals, conflicts between interest and ability, or external pressure from others (Buyarski, 2009). Gordon (2007) suggested that career advising can assist students through the exploration process and help them to develop decision-making skills.

Major-changers. Major-changers are not as easy for advisors to approach due to differences in subtypes. All major-changer subtypes enter college decided about their academic majors but change their minds for a variety of reasons, such as lack of information, outside influences, developmental issues, or academic difficulty (Buyarski, 2009; Gordon & Steele, 2015; Steele & McDonald, 2000). Lack of information refers to students not knowing what academic majors are offered at a college or university, possessing limited knowledge about occupations, not understanding the academic major and career decision-making process, or not engaging in self-exploration of interests, abilities, skills, and values (Steele & McDonald, 2000). Without this information, students often make unrealistic or uninformed academic major choices. Moreover, outside influences such as family members and friends profoundly influence student decisions to pursue particular academic majors (Steele & McDonald, 2000). If the original choice was not their own, students are likely to change academic majors. More important, not every student who enters college is developmentally ready to decide on an academic major. When these developmental issues exist, students may feel pressure to select an academic major but ultimately change their minds once they are ready (Steele & McDonald, 2000). Students who face academic difficulty in their major often change either voluntarily (due to poor performance) or involuntarily (as they are required by the academic unit to leave the major (Steele & McDonald, 2000).

In a qualitative study, Milsom and Coughlin (2015) investigated the experiences of 10 college students regarding their academic majors, including an emphasis on the factors that influenced the students' satisfaction or dissatisfaction with the major. Participants reported having experienced limited exposure to academic majors and career options prior to entering college (Milsom & Coughlin, 2015). As a result, they discovered academic majors during college in which they were more interested than their initial selection. However, several participants expressed concerns regarding the time and money needed to change academic majors and complete the more satisfying academic program (Milsom & Coughlin, 2015). The researchers found that participants lacked sufficient self-awareness when they had selected their initial academic majors. In essence, the students had selected majors without a solid understanding of their skills and interests or how skills and interests may influence career options (Milsom & Coughlin, 2015). Overall, the findings in this study supported Steele and McDonald's (2000) research related to major-changers.

Career Development Theory

The purpose of this study was to explore the experience of being undecided about academic majors for Latino/a college students who are changing their academic major (i.e., those in the *major-changer* and/or *first-year student* subgroup of undecided students). The findings from this study will provide fresh insights for career advisors who wish to assist these students. Overall, the literature consistently showcases three key theories that have CD implications for undecided Latino/a college students: (a) Super's life-span, life-space theory (Arbona, 1995; Buyarski, 2009; Gross, 2004; Niles &

Hutchison, 2009; Super, 1957), (b) social cognitive career theory (Daniels et al., 2011; Lent & Brown, 1996; Niles & Harris-Bowlsbey, 2009), and (c) Chickering and Reisser's vectors theory (Chickering & Reisser, 1993; Pascarella & Terenzini, 2005). When all three of these theories are taken into consideration, they begin to address the needs and characteristics of undecided Latino/a students (e.g., choice anxiety, career identity confusion, low career self-efficacy, low career maturity).

The concept of exploration permeates each of the aforementioned theories and is often used when assisting undecided students with academic major decision making. However, Gross (2004) warned that foundational theories that focus on exploration, such as Super's theory, were developed after studying White affluent males in college. Those theories did not take into consideration how race or ethnicity may affect career development. Therefore, it would be prudent to consider social-related theories in addition to foundational theory because social influences (e.g., family, racial stereotype, gender bias) influence academic major and career decisions made by many racial and ethnic minority college students. In essence, social cognitive career theory may be viewed as complementary to developmental theories, such as Super's and Chickering's theories (Niles & Hutchinson, 2009). The third section of this literature review presents an overview of the three key theories, including how they tie specifically to the Latino/a student population.

Super's Life-Span, Life-Space Theory

Super (1957) postulated that CD is a life-long process affected by both societal factors and personal factors. Within the life-span, life-space theory, CD is viewed as

progressing through five sequential developmental stages: growth, exploration, establishment, maintenance, and disengagement. Central to this theory is the concept of career maturity, which is one's readiness to engage in the developmental tasks associated with one's stage level (Niles & Hutchison, 2009). In other words, if college students possess career maturity, they are ready to progress through stages such as exploration. However, students who lack career maturity may not be prepared to explore academic major and career options. Another central component of this theory is self-concept or self-understanding. According to Super (1957), self-concept refers to one's image of self in a role, position, or situation. The following is a brief description of Super's life-span, life-space theory.

Life-span. Super (1990) defined *career* as “the life course of a person encountering a series of developmental tasks and attempting to handle them in such a way as to become the kind of person he or she wants to become” (pp. 225-226). Niles and Harris-Bowlsbey (2009) added that careers develop within a person's context, including societal expectations, psychosocial development, and occupational opportunities. In other words, not everyone has equal access to occupational opportunities; moreover, outside expectations may influence career selection (e.g., traditional male occupations versus traditional female occupations). In order to address the lifelong nature of CD, Super (1957) identified a series of developmental tasks that are encountered throughout the life-span. Each series of tasks is related to specific stages of CD, resulting in five stages throughout the life-span: growth, exploration, establishment, maintenance, and disengagement (Super, 1990).

Growth (childhood). Growth occurs during childhood (ages 4-13), when young children progress through substages of fantasy, interest, and capacity (Super, 1990). Children participate in occupational role playing by using their curiosity and exploring environmental influences such as home, school, and family relationships (Niles & Harris-Bowlsbey, 2009). For example, a child might engage in fantasy play about being a medical doctor or a teacher due to exposure to these fields. Moving through this stage, children are introduced to the importance of planning for the future, as well as exploring educational and occupational options (Niles & Harris-Bowlsbey, 2009). However, Niles and Hutchison (2009) found that many college students possessed only basic levels of understanding about self-concept, educational options, and occupational opportunities. Moreover, many college students potentially attempt to declare academic majors without sufficiently engaging in the growth process. Career advisors must assess the degree to which college students have participated in activities leading to an understanding of self, academic majors, and occupations (Niles & Hutchison, 2009).

Exploration (adolescence). Within the context of higher education, the exploration stage is considered most relevant when examining undecided Latino/a students, since many traditional-age college students are in the age range associated with this stage (ages 14-24; Arbona, 1995). Through exploration, college students investigate career options, become aware of their interests and abilities, and develop the skills needed to enter a specific career (Evans, 2003). They begin to specify educational and occupational preferences, including academic major preferences. As Niles and Hutchison (2009) pointed out, specifying academic major preferences requires the ability

to actually make decisions about one's future. Ultimately, in the exploration stage, students crystalize their educational and occupational preferences and implement their choices made (Niles & Harris-Bowlsbey, 2009).

Establishment (early adulthood). Career establishment typically occurs during early adulthood (ages 25-45) and involves three developmental tasks: stabilizing, consolidating, and advancing (Super, 1990). Through stabilization, the person assesses and determines whether he or she possesses the skills and interests needed to succeed in the selected academic major or occupation. Once the person is stabilized in the implemented choice, he or she stops questioning the decision and focuses on developing a positive reputation in the occupation (consolidating; Niles & Harris-Bowlsbey, 2009). The person focuses on advancing in the chosen occupation. However, it is important to note that the person might determine that his or her occupational choice was a poor decision; in this case, the person can recycle to the exploration stage.

Maintenance (middle adulthood). During maintenance (ages 45-65), workers are challenged with the realization of needing to keep up with innovations in their field (Super, 1990). As a result, they must choose whether to update their knowledge and skills, remain in the current position, or changing occupations altogether. According to Niles and Hutchison (2009), returning adult college students are often in this stage.

Disengagement (late adulthood). In disengagement (ages 65 and older), the physical and mental capacities of workers begin to decline and they may lose interest in work activities (Super, 1990). Their attention shifts from work toward retirement

planning and living. At this stage, they leave the workforce and ultimately complete Super's stage theory.

Life-space. According to Niles and Harris-Bowlsbey (2009), the life-space component of Super's theory recognizes that people are different regarding the amount of importance that they attach to their work. People also differ in the roles that they fulfill throughout their lives. For instance, Super (1990) posited that people play nine potential roles during their life-spans: son or daughter, student, leisurite, citizen, worker, spouse or partner, homemaker, parent, and pensioner. These roles play out in the context of four theaters: home, school, workplace, and community (Super, 1990). The combination and interaction of life roles and theaters creates an individual's life-space and influences the meaning that a person places on his or her work (Super, 1990). Therefore, it is imperative for people to explore their understanding of self (i.e., self-concept) when making career decisions.

Even though the life-space component of Super's theory addresses individual context, it does not necessarily account for fundamental differences between people in similar roles (Niles & Harris-Bowlsbey, 2009). For instance, two individuals might similarly identify as the role of student in the theater of school but differ regarding cultural origin. Thus, career advisors may be tasked with helping college students to examine their specific contexts and self-concepts when making career decisions.

Research based on Super's theory. From an HRD perspective, Swanson and Holton (2009) stated that Super's theory is one of the most powerful CD theories in HRD due to its focus on change. Evans (2003) also maintained that Super's theory is

arguably one of the leading developmental theories in the field of CD; however, researchers have questioned the relevance of Super's theory when examining CD in specific subgroups in the Latino/a population. For instance, Arbona (1995) found that many of the tenets of Super's theory apply to certain segments of the Latino/a population, such as college-educated individuals, but the theory may not be universally applicable to all Latinos/as. That being said, Bullington and Arbona (2001) examined Mexican American adolescents in a qualitative study to determine whether they were participating in suitable career development tasks, as outlined in Super's theory. They also wanted to determine whether students viewed their ethnicity as a factor in career-related behaviors. Results of the study indicated that all participants were involved in vocational tasks that aligned with the exploration stage of Super's theory. These findings were appropriate, given the age group of the participants. Each of the participants showed evidence of future planning, exploration, and realism, suggesting that they possessed career maturity. Bullington and Arbona (2001) noted that these findings support other studies that have indicated that Latino/a students are similar to White students regarding career ambitions and career decision-making skills. However, the results also showed that racial and family contexts were directly related to the students' CD, a notion not fully addressed in Super's theory.

In a quantitative study ($N = 147$; Mexican American participants $n = 71$ and non-Hispanic White participants $n = 76$), Caldera et al. (2003) compared Mexican American and Non-Hispanic White college women regarding factors that influenced their commitment to career choice. The researchers utilized Super's (1990) archway model as

the theoretical context for their study. The archway model was created using Super's life-span, life-space theory to suggest possible predictors of CD processes (Caldera et al., 2003). The researchers found that Latina students were motivated to surpass their parents rather than emulate them, especially given that the majority of the Latina students in the study were first-generation college students. The Latina students experienced added pressure to make correct career decisions, succeed, and surpass the educational and occupational levels of their parents, in contrast to White counterparts. Caldera et al. (2003) concluded that their findings corresponded well with Super's proposals in the life-span, life-space theory.

Limitations of Super's theory. Gross (2004) warned that foundational theories that focus on exploration, including Super's theory, were often developed by studying primarily White affluent males bound for college. These theories do not take into consideration how one's race or ethnicity may affect CD. Therefore, it would be prudent to consider social-related theories in addition to foundational theory because social influences (e.g., family, racial stereotype, gender bias) influence career decisions made by many racial and ethnic minority college students (Gross, 2004).

Other limitations to Super's theory include its age and its linear nature. Even though scholars such as Gordon (2006), Niles and Harris-Bowlsbey (2009), and Niles and Hutchison (2009) still utilize this theory, there may be questions regarding the theory's relevance to modern college student issues, given that the theory originated in the 1950s. Niles and Hutchison (2009) suggested refining Super's theory to address how people might recycle through career stages or engage in multiple stages simultaneously.

Nevertheless, Super's life-span life-space theory may advance the topic in the current study and be relevant to undecided Latino/a students, although it must be expanded to examine ethnic and cultural impacts on vocational behavior, as well (Arbona, 1995).

Social Cognitive Career Theory

Developed by Lent et al. (1994), SCCT draws greatly from Bandura's social cognitive theory. In his theory, Bandura (1986) developed a triadic reciprocal model whereby one's characteristics, environment, and behaviors interact and influence one another. Central to this theory is one's expectations about the ability to complete a task successfully (i.e., self-efficacy). According to Bandura (1986), self-efficacy influences a person's willingness to engage in specific tasks and behaviors. People are more likely to participate in a task or behavior if they believe that they will succeed, regardless of barriers that they might encounter. Drawing from Bandura's influence, SCCT describes the "complex relationship among self-efficacy beliefs, outcome expectations, and personal goals in the career decision-making process" (Niles & Hutchison, 2009, p. 85). Basically, Lent et al. (1994) incorporated Bandura's model into SCCT and highlighted self-efficacy as interacting with outcome expectations and personal goals to influence career decision making.

Within SCCT, *self-efficacy* is based on one's belief about one's capacity to participate in actions needed to attain a specific outcome, such as choosing an academic major (Niles et al., 1997). Lent and Brown (1996) presumed that self-efficacy beliefs are obtained through four sources: personal performance accomplishments, vicarious learning, social persuasion, and physiological states. Of these four sources, personal

accomplishments are considered to have the greatest influence on self-efficacy (Lent & Brown, 1996). For example, if a student performs well in a class and receives a high grade, his or her belief regarding ability in the course material may increase. This could result in an increased belief that he or she would perform well in the specific academic major.

Outcome expectations describe what one expects to happen if one takes action or engages in a behavior (Lent & Brown, 1996). According to SCCT, outcome expectations regarding career paths originate from vicarious learning experiences such as secondhand information from friends and family (Lent & Brown, 1996). For instance, undecided college students might develop expectations about what it means to be in a career (e.g., medical doctor) based on information that they receive from family members, who may or may not be in that field.

Personal goals refer to one's determination to obtain a desired outcome by engaging in actions (Niles et al., 1997). According to Lent and Brown (1996), personal goals play a key role in career decision making. However, the goals that people set can be affected by their self-efficacy and outcome expectations (Lent & Brown, 1996). The interactive nature of self-efficacy, outcome expectations, and personal goals mirrors the triadic reciprocal model outlined in Bandura's theory. The triadic model in SCCT interacts with an individual's characteristics and environments to facilitate CD (Lent & Brown, 1996). Ultimately, SCCT proposes that people are less likely to transform their career interests into goals or actions when their self-efficacy is negatively influenced by perceived barriers to success (Lent & Brown, 1996).

In the context of academic major selection, the “interaction of these three factors [self-efficacy, outcome expectations, and personal goals] informs a student’s beliefs about his or her ability to play a central role in his or her own academic and career decision-making process” (Niles & Hutchison, 2009, p. 85). This concept is especially relevant to undecided Latino/a students, since many of these students possess a low sense of self-efficacy (Arbona, 1995). In addition, the decision regarding academic major and career is often viewed as a family decision, rather than an individual decision, among Latino/a college students (Gamboa & Vasquez, 2006). The notion of family influence may ultimately influence the student’s belief that he or she has control over the academic major decision. Finally, there is the potential for Latino/a college students to experience barriers to educational success while simultaneously striving to correct family struggles, improve finances, and fulfill family and cultural obligations. Barriers such as economic inequalities (Clark et al., 2013), cultural norms (Fouad, 1995), gender-related barriers (Risco & Duffy, 2010), and lack of parental support (Corkin et al., 2008) have the potential to influence the academic major and career decision-making process of Latino/a college students. The combination of barriers and pressure alone would be enough to create issues for Latino/a students; however, the situation can become even more challenging if the Latino/a student is undecided about his or her academic major. All in all, SCCT may be a relevant theory to apply to this student demographic due to the complex interaction between cultural identity and CD.

Research based on SCCT. Research indicates that undecided students are more likely have low career self-efficacy than their peers who are decided (Bullock-Yowell et

al., McConnell, & Schedin, 2014; Niles et al., 1997). In other words, undecided students may lack assurance in their ability to make decisions about their academic majors or careers. Bullock-Yowell et al. (2014) suggested that SCCT might be an effective framework for examining undecided students' career decision-making self-efficacy. Arbona (1995) maintained that the construct of self-efficacy is pertinent to Latinos/as because they are likely to experience barriers during their educational and vocational pursuits. Thus, SCCT has the potential to expand on Super's theory when examining the undecided Latino/a student population.

In a quantitative study, Flores and O'Brien (2002) analyzed SCCT with a sample of adolescent Mexican American women ($N = 364$). The researchers examined the impact of background variables on the women's career self-efficacy and the influence of parental support, career interests, career self-efficacy, and perceived barriers on career aspirations. The results indicated that career self-efficacy predicted career interests and positively affected career choice. Variables such as parental support and perceived barriers predicted career choice. Several of the tenets of SCCT were supported by Flores and O'Brien's (2002) study. The authors concluded that SCCT has the potential to be a powerful tool for describing Mexican American student CD.

In a quantitative study ($N = 128$ Latino/a ninth graders), Gushue (2006) explored the relationships between racial and ethnic identity and two components of SCCT: self-efficacy and outcome expectations. The researcher operated under the assumption that culture or race could affect CD within the SCCT framework. Results of the study indicated that students' identification with their racial and ethnic group influenced their

self-efficacy and self-efficacy arbitrated the influence of racial identity on outcome expectations. Thus, racial and ethnic identity did not directly influence outcome expectations but influenced self-efficacy, which in turn influenced outcome expectations. In this sample, adolescents who successfully navigated tasks associated with achieving their racial and ethnic identity also gained confidence in their ability to make career decisions (Gushue, 2006). These findings seem to support Gross' (2004) conclusion that Latino/a students must strike a balance between career identity and cultural identity. Gushue (2006) concluded that, through the use of SCCT, it is important to broaden the definitions of CD and identity development, which are included in traditional CD theories such as Super's theory. It is important to examine the role of social contexts in the formation of career interests and self-efficacy (Gushue, 2006).

Limitations of SCCT. Although several researchers have utilized SCCT to frame studies of the Latino/a population, Leal-Muniz and Constantine (2005) warned that future research should continue to evaluate the individual components of SCCT as they apply to Latinos/as, specifically Mexican Americans. Lent and Brown (1996) stated that SCCT may be viewed as complementary to developmental theories, such as Super's theory. SCCT is not necessarily a substitute for other theories, per se. Overall, as pointed out by Niles and Hutchison (2009), SCCT addresses an important dimension of the career decision-making process (i.e., factors that affect self-efficacy and how people think of themselves); however, it does not fully address the developmental tasks that are encountered when exploring academic major and career options. Thus, utilizing both

Super's theory and SCCT could be a good theoretical combination when examining the experience of being undecided for Latino/a college students in this study.

Chickering and Reisser's Vectors Theory

Chickering and Reisser's vectors theory has deeply influenced research on college student development, including CD (Pascarella & Terenzini, 2005). According to Chickering and Reisser (1993), college students move through seven vectors of development that contribute to formation of their identities. They posited that progression through the vectors is not linear or sequential. College students may move through multiple vectors at the same time, movement along one vector may interact with other vectors, students move through the vectors at different rates, and students may recycle through vectors that have already been addressed (Chickering & Reisser, 1993). The vectors build on each other over time. The seven vectors are developing competence, managing emotions, moving through autonomy toward interdependence, developing mature interpersonal relationships, establishing identity, developing purpose, and developing integrity. The following is a brief description of each vector.

Developing competence. Developing competence focuses on three separate competency areas: intellectual competence, physical and manual competence, and interpersonal competence (Chickering & Reisser, 1993). Intellectual competence includes acquiring skills and knowledge about a subject matter (e.g., options for a college major); gaining aesthetic, cultural, and intellectual sophistication; and increasing cognitive skills, such as critical thinking and reasoning ability (Evans, Forney, Guido, Patton, & Renn, 2010). Physical and manual competence includes gaining strength and

physical ability (e.g., through arts, crafts, sports) and putting performance on display for approval or criticism by others (Evans et al., 2010). Interpersonal competence entails active listening, communicating effectively, and tuning in to others (Evans et al., 2010). College students learn to trust their abilities, engage in dialogue, and receive feedback from others as their competences increase (Chickering & Reisser, 1993).

Managing emotions. Managing emotions begins when college students allow their emotions (e.g., anxiety, anger, depression, desire, guilt) to enter their awareness instead of trying to eliminate them (Chickering & Reisser, 1993). Development occurs when college students learn to channel these emotions and release irritations before they have lasting negative effects (Chickering & Reisser, 1993). The challenge is for college students to understand their emotions and express them in responsible and appropriate ways (Evans et al., 2010).

Moving through autonomy toward interdependence. According to Chickering and Reisser (1993), moving through autonomy toward interdependence involves learning to function with self-sufficiency, pursuing self-chosen goals, and becoming less restricted by the opinions of others. This vector also includes recognition that one cannot be entirely independent (Chickering & Reisser, 1993).

First, college students must claim their emotional independence by freeing themselves from the need for constant reassurance and approval from outside entities, such as family (Chickering & Reisser, 1993). This might include separation from parents. However, separation from family can be especially difficult for Latino/a students. According to Fouad (1995), cultural values such as *allocentrism* (in which an

individual's goals are subordinate to group goals), *familismo* (a strong affiliation with the nuclear or extended family), *simpatia* (the need to make relationships pleasant and smooth), and *respeto* (appropriate deference paid to an individual's gender and generation) can influence Latino/a students' career decision making, including the ability to claim emotional independence. Researchers have suggested that Latino/a college students often strive to fulfill family and cultural obligations throughout the college experience (Gamboa & Vasquez, 2006; Gross, 2004; Risco & Duffy, 2010). This aspect is discussed later.

Second, within this vector, students must develop the ability to think critically and independently while solving problems in a self-directed way (Chickering & Reisser, 1993). Once this freedom is achieved, students can build new relationships based on equality and interdependence rather than on the need for approval from others (Chickering & Reisser, 1993).

Third, developing autonomy concludes in a student's awareness that his or her actions affect others (Chickering & Reisser, 1993). Relationships with parents can be restored and the student gains awareness of his or her place in community (Evans et al., 2010). The result is interdependence with others whereby the student recognizes and respects the autonomy of others (Chickering & Reisser, 1993).

Developing mature interpersonal relationships. This vector includes tasks such as the development of interpersonal and intercultural tolerance, as well as an appreciation for diversity (Evans et al., 2010). It also includes development of the capacity to form intimate relationships with others (Evans et al., 2010). In order to

tolerate and appreciate differences, students must challenge their preconceived notions, reduce bias, increase empathy, and embrace diversity. Then, students must turn away from self-absorption while choosing healthy relationships and making lasting commitments to others. Thus, students' relationships move away from too much dependence and toward equal interdependence (Chickering & Reisser, 1993).

Establishing identity. In establishing identity, the primary development task for college students is development of a sense of self (e.g., Who am I?; Pascarella & Terenzini, 2005). The development of identity includes comfort with one's body, comfort with gender and sexual orientation, sense of self in multiple contexts (e.g., social, historical, and cultural), clarification of roles and lifestyle, sense of self in response to feedback, and personal stability (Chickering & Reisser, 1993). Until this point, many college students view themselves as others view them; however, students in this vector are beginning to develop a new understanding of their identities. As a result, they may begin to challenge their original notions about college major and career. Chickering and Reisser (1993) also maintained that during this vector students begin to reflect on their family of origin and see themselves within a social context (e.g., Who am I? versus Who do my parents think I am? How does my cultural heritage affect who I am?). For this reason, the establishing identity vector potentially provides insight into CD and selection of a major by undecided Latino/a college students.

Developing purpose. In developing purpose, college students start to explore their direction and purpose (e.g., Who am I going to be someday? Where am I going with my life? Pascarella & Terenzini, 2005). Therefore, this vector can also provide

insight into CD and selection of a major. According to Chickering and Reisser (1993), developing purpose entails “an increasing ability to be intentional, to assess interests and options, to clarify goals, to make plans, and to persist despite obstacles” (p. 209). Throughout this vector, students formulate action plans and set priorities regarding personal interests, vocational plans, and interpersonal commitments (Chickering & Reisser, 1993). Ultimately, developing purpose has the potential to be an important developmental task for undecided Latino/a college students. However, it is important to note that Chickering and Reisser’s theory was not developed specifically for racial and ethnic minority students. Research has called into question simply asking questions such as “Who am I?” and “Who do I want to be?” when examining Latino/a student CD (Gross, 2004).

Developing integrity. According to Chickering and Reisser (1993), developing integrity involves humanizing one’s values (moving away from uncompromising beliefs), personalizing one’s values (affirming one’s core values while respecting other viewpoints), and developing congruence (matching one’s values with socially responsible behavior). Students bring an assortment of assumptions to college regarding right versus wrong, good versus bad, and important versus unimportant (Chickering & Reisser, 1993). These assumptions include a multitude of topics and contexts, including preconceived notions about majors and careers. For example, certain majors and jobs may be viewed as inferior, unimportant, or wrong. Thus, developing integrity also has the potential to provide insight into CD and selection of a major by undecided Latino/a

students. Through this vector, Latino/a students can begin to personalize their values and select guidelines to suit themselves rather than others (Chickering & Reisser, 1993).

Research based on Chickering and Reisser's theory. Many researchers have studied Chickering and Reisser's theory, prompting Pascarella and Terenzini (2005) to state that "no psychosocial theorist has had more influence on the research of college student development or administrative efforts to promote it than Arthur Chickering" (pp. 20-21). Within the context of applying Chickering and Reisser's theory to CD, Galilee-Belfer (2012) found that many of the programs targeted at undecided college students focus on developmental outcomes associated with the Vector 6 (developing purpose). However, Galilee-Belfer (2012) argued for designing programs that start by addressing Vector 1 (developing competence). According to her research, programming that focuses on developing purpose assumes that undecided college students possess the academic and intellectual sophistication to engage in Vector 6; however, undecided students are often uninformed regarding how academic majors work, what employers value, and how to make informed career decisions (Galilee-Belfer, 2012). Galilee-Belfer (2012) advocated helping students to develop the following competencies as prerequisites to developing purpose: clarifying the role of a major (determining how much of the college curriculum is dedicated to a major), and clarifying what it means to choose a major (recognizing that students' future career options are not directly associated with college majors).

Risco and Duffy (2010) conducted a quantitative study of incoming Latino/a college students ($N = 236$) and compared genders to explore their work values, career

decidedness, and career selection comfort. Results indicated gender differences among Latino and Latina college students regarding their career decision making. The authors concluded that gender differences emphasize the importance of intersections in identities when working with racial and ethnic minority students (e.g., male and Latino versus female and Latina). This is an important finding when taking Chickering and Reisser's theory into consideration because it underscores unique issues faced by Latino/a students within the vectors of establishing identity and developing purpose).

Corkin et al. (2008) suggested that members of different ethnic groups may differ regarding the types of career barriers that they face, which may influence the selection of academic majors. The authors conducted a quantitative study of Puerto Rican college students ($N = 337$) and found that exploring interests and gathering information about academic majors and careers may not be sufficient for all undecided Latino/a students during the decision-making process. Exploration may be particularly insufficient if parents or family members pressure the student to pursue a specific major (Corkin et al., 2008). The authors suggested that barriers such as lack of parental support and low self-efficacy are relevant when discussing Latino/a students. These findings highlight potential issues faced by the Latino/a student population within Vector 3 (moving through autonomy toward interdependence).

Limitations of Chickering and Reisser's theory. According to Evans et al. (2010), researchers have called into question the applicability of Chickering and Reisser's vectors theory for students who do not come from White affluent backgrounds. For instance, Gross (2004) concluded that components of Chickering and Reisser's

theory were insufficient to explaining fully the development of Latino/a students. Through a qualitative ethnographic study of Latino business students, Gross (2004) found a possible intersection between CD and cultural identity development among racial and ethnic minority students. Results of the study suggested that Latino/a college students face unique challenges such as stereotype and prejudice when striking a balance between career and cultural identity. Study participants discussed how norms in their cultural heritage influence their career decision making, especially when they opted to pursue careers that were counter to cultural norms. Gross (2004) concluded that theories that focus on the questions “What am I?” (Vector 5, establishing identity) and “Who do I want to be?” (Vector 6, developing purpose) are incomplete when examining Latino/a students. Gross (2004) advocated that a third dimension of social influences (e.g., class barriers, family and friends, gender stereotypes, and racial and ethnic stereotypes) is pivotal for Latino/a identity and CD.

Another limitation to Chickering and Reisser’s theory could be that it was last revised in 1993. At that time, the vectors were reordered and clarified in response to a considerable amount of research conducted since the theory’s inception (Pascarella & Terenzini, 2005). Yet, no substantial revisions have occurred since 1993 and questions remain when applying the theory to racial and ethnic minorities or to issues faced by contemporary college students (Evans et al., 2010).

Gordon and Steele (2015) warned that, when advisors are culturally different from students, they may inadvertently ignore the role of students’ cultural identities in the major and career decision-making process. It is imperative for career advisors to

understand these differences and the complex problems that arise when attempting to provide sound career advising for undecided Latino/a students. While considerable research has focused on understanding undecided college students, multiple researchers have suggested a lack of studies to examine specifically indecision about academic majors by racial and ethnic minority students (Gordon & Steele, 2015; Risco & Duffy, 2010). Therefore, Chickering and Reisser's theory has the potential to advance the research in the current study, so long as the potential interplay between identities is taken into consideration.

Other Theories and Models

In addition to the three primary theories reviewed herein, one other theory and one model appear relevant to this study, even though they were not used to guide the current research effort: (a) Holland's (1985) typology of persons and environments, and (b) Gordon's (1992) exploration process model.

Holland's typology of persons and environments. Holland (1985) supplemented Super's theory by examining the relationship between an individual's personality and the characteristics of work environments. He identified six types of personality: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional (Holland, 1985; Niles & Hutchinson, 2009). The primary assumption was that career interests are a manifestation of one's personality and that one should select a career that complements one's personality (Niles & Hutchinson, 2009). Essentially, the work environment selected by an individual and the personality of the individual are connected. As a result, people strive to identify ways to match their work environments

to their personalities in order to increase satisfaction and success (Niles & Hutchinson, 2009).

Arbona (1995) found that Latino/a college students view the world of work similarly to their White peers. Arbona posited that Holland's typology of persons and environments may also be relevant when assessing academic major and career interests of Latino/a college students. Holland's theory emphasizes the need to explore personality traits in addition to interests and skills when selecting a major and career path.

Gordon's exploration process model. Gordon (1992) suggested a comprehensive process to assist undecided students with the selection of academic major and career, including the exploration of self, academic majors and minors, occupations, and analysis of the decision-making process. This model includes four main components: self-knowledge, educational knowledge, occupational knowledge, and decision-making knowledge (Steele & McDonald, 2000). According to Steele and McDonald (2000), the aim of Gordon's model is to establish a framework for helping college students to gather information needed to make realistic and satisfying academic major and career choices. However, undecided Latino/a college students experience unique influences and barriers in the decision-making process. They also possess specific characteristics that must be taken into consideration when advising these students. Nonetheless, below is an overview of Gordon's model as a potential intervention tool to use when advising undecided Latino/a college students.

Self-knowledge. Self-knowledge involves assessing one's abilities, values, interests, and personality, as well as goal setting (Steele & McDonald, 2000). In the context of undecided college students, the journey toward major declaration often begins as a journey of self-exploration. In order to make informed decisions regarding the selection of academic major, students must reflect on how their values, interests, personality, and skills overlap. However, Fouad (1995) emphasized the importance of taking cultural context into consideration when assisting with self-assessment. The values of individual Latino/a college students might be influenced by cultural values; furthermore, their interests may be influenced by limited exposure to career options and/or family expectations (Bullington & Arbona, 2001). Therefore, career advising must be flexible enough to incorporate multiple variables that may influence the Latino/a college student's self-concept (Fouad, 1995).

Educational knowledge. Educational knowledge couples self-knowledge with the academic offerings at a college or university (Steele & McDonald, 2000). College students must understand the academic majors, minors, certificates, and other credentials and licenses offered at their institution of higher education. They must know their options for academic major in order to make informed decisions. However, it is also important to take into consideration Latino/a cultural norms related to gender when examining which academic majors may be considered as realistic options. Risco and Duffy (2010) found gender differences among Latino and Latina college students regarding their career decision making based on cultural expectations. Therefore,

undecided Latino/a college students may need to explore the full range of educational opportunities, regardless of gender-based stereotypes and barriers.

Occupational knowledge. Occupational knowledge affects CD, job-seeking skills (e.g., resume and cover letter writing, interview techniques), career exploration activities (e.g., co-ops, internships, job shadowing), and assessing career information (Steele & McDonald, 2000). Throughout this component of Gordon's model, college students identify ways to connect the academic majors that they have selected with the world of work. However, Gordon (2006) found that some Latino/a college students consider only a narrow range of occupations because certain options are thought to be inappropriate in their culture. Since students can experience limited exposure to multiple occupations, the ultimate goal is for students to learn more about traditional and nontraditional job titles and job duties. Fouad (1995) found this to be important for Latino/a students in order to increase their awareness of nontraditional careers. This concept is supported by Gross's (2004) study, which found that students who engaged in experiential learning opportunities, such as internships, were better able to establish a career identity, confidence, and self-efficacy. This was especially relevant for Latino/a students, many of whom were navigating through inequities in the work place and achieving success in fields where Latinos/as are historically underrepresented.

Decision-making knowledge. Decision-making knowledge integrates self-knowledge, educational knowledge, and occupational knowledge (Steele & McDonald, 2000). It addresses influences on decision making, development of decision-making procedures, and approaches to implementing goals (Steele & McDonald, 2000), which

are significant because exploring career interests and gathering information about vocational options may not be sufficient for all undecided Latino/a students (Corkin et al., 2008). Parent and family pressures can play a large role in the Latino/a career decision-making process (Corkin et al., 2008). Therefore, Fouad (1995) warned that advising should take familial and social factors into consideration rather than simply focusing on individual factors related to Latino/a college student decision making. Gordon's model provides an integrated tool for "identifying student issues, categorizing resources, and formulating basic probing questions for common student issues" (Steele, 2003, p. 13).

Chapter Summary

This review of the literature points to glaring gaps in current knowledge about the topic of this study. The Latino/a college student population is growing and these students are lagging behind other groups in relation to CD. This student population experiences unique influences on initial selection of academic majors and careers (e.g., barriers to college access, academic ill preparedness, cultural issues, gender expectations, and family issues). Empirical research is lacking regarding the specific study of Latino/a college students who opt to change their academic majors. Social context is important when examining the Latino/a population due to heterogeneity of Latino/a subgroups.

Further research is needed to understand the experiences of Latino/a college students who experience indecision or change decisions in order to provide insights for HRD professionals, specifically CD professionals, who wish to assist these students.

Few studies in higher education have incorporated the HRD perspective into the study of college student CD. Furthermore, HRD scholars have not adequately examined CD in higher education, focusing instead on CD in the context of the workplace (Swanson & Holton, 2009). While HRD scholars have recognized the importance of CD, its influence on HRD has declined over the years (Swanson & Holton, 2009). Gordon and Steele (2015) summarized the overall issue best: “The lack of research on racial and ethnic students who are undecided makes it difficult to understand who they are, their reasons for indecision, and specific ways to help them make educational and career decisions” (p. 125).

CHAPTER III

METHODOLOGY AND METHODS

According to Crotty (1998), two primary questions must be addressed when developing a research study. The first question relates to what methodologies and methods will be used in the research and the second question addresses how one justifies the selection and use of these methodologies and methods. In order to answer these questions, Crotty (1998) proposed four additional questions, which form the basic components of research processes: “(a) what methods we propose, (b) what methodology governs our choice and use of methods, (c) what theoretical perspective lies behind the methodology in question, and (d) what epistemology informs this theoretical perspective” (Crotty, 1998, p. 2). It is important to note that, within these questions, a researcher’s epistemological viewpoint informs his or her theoretical perspective. Gall, Gall, and Borg (2007) defined *epistemology* as a specific segment of philosophy that studies the nature of knowledge and truth, as well as the process by which knowledge is acquired and validated. Other researchers have used such terms as *worldview* (Creswell, 2009) and *paradigm* (Mertens, 2005) to describe similar concepts. Essentially, a researcher’s epistemology (belief about how one knows truth) affects the way he or she looks at the world (paradigm).

The researcher’s epistemology will influence his or her theoretical perspective, which Crotty (1998) defined as “the philosophical stance informing the methodology and thus providing a context for the process and grounding its logic and criteria” (p. 3). There is a cascading effect whereby epistemology affects theoretical perspective, which

in turn affects the methodology used, which in turns influences the selection of methods. Examples of epistemology include objectivism, constructionism, and subjectivism (Crotty 1998). These epistemologies yield theoretical perspectives such as positivism, post-positivism, critical inquiry, interpretivism, and postmodernism (Crotty, 1998). Options for methodology (i.e., research design) include phenomenological research, case study, ethnography, survey research, grounded theory, heuristic inquiry, and experimental research (Crotty, 1998).

This chapter addresses the purpose of this study, as well as the research design and paradigm, including the epistemological underpinnings of the selected methodology. Methods used for data collection and analysis are described. Strategies for ensuring trustworthiness of the findings are examined, and the positionality of the researcher is disclosed.

Restatement of the Purpose and Research Questions

The primary purpose of this study was to explore the experience of being undecided about academic majors for Latino/a college students who are changing their academic majors. This topic of study is significant for four reasons: (a) There is a dearth of career development literature focusing on Latinos/as (Wells et al., 2010), (b) Latino/a enrollment in degree-granting institutions is increasing but their rate of degree completion lags behind other groups (Clark et al., 2013; Pew Research Center, 2015), (c) there is a shortage of research specifically related to Latino/a college students who are undecided about academic majors (Gordon & Steele, 2015), and (d) career advisors must

understand the experience of being undecided by these student group in order to serve them (Gordon & Steele, 2015).

The lack of research focusing on undecided Latino/a students is disturbing, given that the Latino/a population has become the largest minority group in the nation (Clark et al., 2013). Thus, this topic is timely and fills the knowledge gap regarding undecided Latino/a college students. Findings from this study provide necessary insights for career advisors who wish to assist these students. One research question guided this study:

What is the lived experience of being undecided about an academic major for Latino/a college students at an institution of higher education?

This study was delimited to the state of Texas. Texas is heavily populated by Latinos/as, who constitute 39% of the state's population (Pew Research Center, 2016b). Texas ranks second in the United States for total Latino/a population; 87 % of the Latinos/as in Texas identify as being of Mexican origin (Pew Research Center, 2016b). Approximately 50% of all Latino/a college students are the first in their family to go to college (Santiago, 2011). Participants were recruited from a public, 4-year, PWI of higher education in Texas; there were no participants from other geographic areas.

Merriam and Tisdell (2016) detailed six common qualitative research designs: basic qualitative research, phenomenology, ethnography, grounded theory, narrative inquiry, and qualitative case studies. This study used phenomenological research as the methodology. Students who were involved in this study were asked to describe their experiences and talk about their meanings to provide understanding of the lived experience of being undecided for Latino/a college students.

Research Design

Creswell (2009) maintained that epistemologies, research strategies, and methods contribute to establishment of a research design, which tends to be quantitative, qualitative, or mixed. For example, a researcher who holds the constructivist worldview might select an ethnographic design and collect data by observing behavior; however, a researcher who holds a positivist worldview might select an experimental approach and collect data through pretest/posttest measures (Creswell, 2009). The research question itself is a determining factor in the choice of an appropriate research design or methodology.

Based on the purpose of the study and the research question, phenomenology was deemed to be the appropriate methodology. Patton (2002) maintained that the term *phenomenology* is so popular that its true meaning has become somewhat watered down. Essentially, phenomenology can refer to an interpretive theory, inquiry paradigm, philosophy, qualitative tradition, or research methods framework (Patton, 2002). Creswell (2009) described phenomenology as a specific strategy of inquiry whereby a researcher attempts to ascertain the essence of lived experiences about a phenomenon. Within this definition, phenomenological research is separated from phenomenology as a philosophy. As a methodology, phenomenology provides a framework by which a researcher brackets (i.e., sets aside) personal experiences so that he or she can understand the experiences lived by the study participants (Creswell, 2009).

Phenomenology as a Philosophy

Merriam (2009) discussed phenomenology in terms of being both a philosophy and a type of qualitative research. She stated that, to a certain extent, all qualitative research can be considered phenomenological because the philosophy of phenomenology underlies qualitative research as a whole (Merriam, 2009). Smith, Flowers, and Larkin (2009) detailed the history and evolution of phenomenology, including the work by four main phenomenological philosophers: Husserl, Heidegger, Merleau-Ponty, and Sartre. Husserl's philosophical work established the importance of focusing on experience and its perception (Smith et al., 2009). Heidegger, Merleau-Ponty, and Sartre built on Husserl's research and contributed to the view of people as being engrossed in a world of cultures, objects, relationships, and languages (Smith et al., 2009). Collectively, these philosophers set the stage for research that recognizes the complex nature of experiences as being lived out by people; moreover, these experiences result in multiple perspectives and meanings that are unique to each person (Smith et al., 2009). As a result, all qualitative studies draw from the philosophy of phenomenology, which brings "a focus on the experience itself and how experiencing something is transformed into consciousness" (Merriam & Tisdell, 2016, pp. 25-26).

To complicate things further, there are various types of phenomenology, depending on the primary philosopher whom one follows (Patton, 2015). For example, transcendental phenomenology draws primarily from Husserl's philosophical work and focuses on comprehensive descriptions of experiences in an effort to identify the essence of those experiences (Creswell, 1998). Transcendental phenomenology "focuses on

descriptions of what people experience and how it is that they experience what they experience” (Patton, 2002, p. 117). Hermeneutic phenomenology draws primarily from Heidegger’s philosophical work and focuses on studying phenomenon as being interpretive rather than descriptive (Smith et al., 2009). Heidegger maintained that all description is already an interpretation by the researcher. Existential phenomenology draws from the philosophical works of Merleau-Ponty and Sartre (Smith et al., 2009). It focuses on situating experiences within a concrete world where humans attempt to understand their consciousness as it relates to the world (Smith et al., 2009). Based on the research purpose and research question, this study was aligned transcendental phenomenology in an attempt to describe the experience being studied.

Phenomenological Study

Whether discussing phenomenology as a philosophy or methodology, Patton (2002) found that the various phenomenological approaches share a common focus on exploring how humans make sense of experiences. As a methodology, the foundational question related to phenomenology centers on the “meaning and essence of lived experiences of a specific phenomenon for a person or group of people” (Patton, 2002, p. 104). Patton (2015) explained that phenomenological research can be distinguished from other types of qualitative research (e.g., basic qualitative research, ethnography, grounded theory, narrative analysis, critical research, case study) because it is based on the assumption that *there is an essence or essences of shared experience*. These essences are the core meanings mutually understood through a phenomenon commonly experienced. The experiences of different people are bracketed,

analyzed, and compared to identify the essences of the phenomenon, for example, the essences of loneliness, the essence of being a mother, or the essence of being a participant in a particular program. The assumption of essence, like the ethnographer's assumption that culture exists and is important, becomes the defining characteristic of a purely phenomenological study. (Patton, 2015, pp. 116-117, emphasis in the original)

From a methodological perspective, Patton (2002) suggested capturing and describing how people experience a phenomenon, including how they perceive it, describe it, feel about it, make sense of it, and remember it. In order to gather these data, methods such as document analysis or in-depth interviews with the people who have directly experienced the phenomenon may be necessary (Patton, 2015). When using phenomenology as a methodology, the researcher studies human experience, sets aside his or her prior beliefs about a phenomenon, and gets to the basic meaning of an experience (Merriam, 2009). The phenomenon in question in this study was the experience of being undecided about a academic major for Latino/a college students who are changing their academic majors. Individual participant context was also important to explore. For example, a participant's gender, affluence, academic preparedness, and cultural heritage may affect the academic major decision. Therefore, consistent with a phenomenological study, the "experiences of each participant will be bracketed, analyzed, and compared to identify the essence of the phenomenon" (Patton, 2002, p. 486).

Merriam (2009) noted that phenomenological research is often confused with case study research. The primary difference is that case study research includes an in-depth analysis of a bounded system (Merriam, 2009). Both methodologies can include the study of phenomena; however, a case study's unit of analysis must be inherently bounded (Merriam & Tisdell, 2016). For instance, this study could have used the case study methodology if the purpose had been to understand the experiences of traditional-age, undecided Latino/a college students who have engaged in career advising through a specific program or class (i.e., a bounded system). Overall, understanding the differences between phenomenology and case study is important when selecting the appropriate methodology.

Epistemological Underpinnings of Phenomenological Research

Identifying the appropriate research paradigm and design is imperative in the pursuit of knowledge (Creswell, 2009). A researcher's methodology is embedded within a theoretical perspective that is informed by the researcher's epistemology (Crotty, 1998). In this study, the phenomenological research methodology is rooted in the interpretive research paradigm (i.e., interpretivism), which is underpinned by constructivism (Crotty, 1998). However, the terms *constructivism* and *interpretivism* are often used interchangeably (Creswell, 2009; Merriam, 2009). Since these two concepts can often become intertwined, it is important to describe both terms. In this study, interpretivism is considered to be a theoretical perspective or paradigm, which is grounded in constructivist epistemology (Gall et al., 2007).

Constructivism

Merriam (2009) maintained that qualitative research is most often located within the constructivist epistemological perspective. Constructivism represents an epistemological position opposing positivism and post-positivism. Positivist and post-positivist theoretical perspectives adhere to the epistemology of objectivism, which assumes that there exists an objective reality (Gall et al., 2007). Positivism views the world and reality as being “out there . . . observable, stable, and measurable” (Merriam, 2009, p. 8) by using the scientific method; however, post-positivism recognizes an objective reality that is known only imperfectly through individuals (Lincoln & Guba, 1985). On the other hand, constructivism assumes that reality is constructed by the people who participate in it (Gall et al., 2007). The basic assumptions guiding constructivism are that “knowledge is socially constructed by people active in the research process, and that researchers should attempt to understand the complex world of lived experience from the point of view of those who live it” (Mertens, 2005, pp. 12-13). In other words, an objective reality does not exist. Instead, there are multiple realities constructed by individuals (Lincoln & Guba, 1985).

According to constructivism, research cannot be independent from the researcher, since there is an interactive link between the researcher and participants (Mertens, 2005). Therefore, researchers must recognize that their backgrounds, values, and biases can shape their understanding of the research taking place (Creswell, 2009). Overall, qualitative research is inductive in nature and looks at individual meaning

(Creswell, 2009). Merriam (2009) stated that “researchers do not ‘find’ knowledge, they construct it” (pp. 8-9).

Patton (2002) posited that constructivism starts with the basic assumption that the human world and the physical world are different from each other. Thus, the human world must be studied differently. Stated differently, the use of the scientific method and the concept of object reality do not necessarily apply to the human world as they do to the natural world (Patton, 2002). Instead, the world of human perception is not absolutely real or true, even though the world may be perceived and experienced by people as being real (Patton, 2002). From an epistemological perspective, constructivism holds that humans construct knowledge about reality and that truth is simply a by-product of consensus among those people who are constructing knowledge (Patton, 2002). By extension, objective facts have no meaning except through people’s frameworks. In the end, there cannot be objective judgments (Patton, 2002).

Interpretivism

Swanson (2005) described the interpretivist theoretical perspective as being similar to constructivism. Interpretive research is concerned with meaning; moreover, it assumes that knowledge and meaning are ultimately individual interpretations (Swanson, 2005). Likewise, within the interpretivist paradigm, there is no objective knowledge. Interpretivism also maintains that there are multiple realities and focuses on subjective meaning making as individuals make sense of experiences (Swanson, 2005). However, in Swanson’s (2005) view, social constructivism is a form of interpretivism.

Several scholars have chosen to combine constructivism with interpretivism and have used the terms synonymously (Creswell, 2009; Merriam, 2009; Patton, 2002), while others have preferred to discuss them separately (Crotty, 1998; Swanson, 2005). Nonetheless, both constructivism and interpretivism include epistemological underpinnings that are important to consider when selecting phenomenological research as a methodology.

Methods

Crotty (1998) described methodology as the strategy or design behind the selection of methods. On the other hand, methods are the specific techniques used to collect and analyze data (Crotty, 1998). Methods may include both quantitative techniques (e.g., surveys and statistical analysis; Mertens, 2005) and qualitative techniques (e.g., interviews, observations, document analysis; Mertens, 2005). The distinction between methodology and method is important because they are not the same thing. The following sections contain descriptions of the methods used for conducting and reporting the current research effort, including sampling, data collection, and data analysis. Prior to conducting the research, approval for the design was obtained from the university's Institutional Review Board (IRB2017-0048M; Appendix A).

Sample Selection

The primary goal of this study was to gain insight into the lived experiences of being undecided about an academic major for Latino/a college students who are major-changers. As such, phenomenological research was the most appropriate approach. According to Merriam (2009), purposive sampling should be utilized in this case.

Purposive sampling requires selecting what Patton (2002) called “information-rich cases” (p. 230) or participants from whom the researcher can learn about the issues related to the research purpose. In other words, participants are intentionally selected to meet the criteria laid out in the study’s statement of purpose. Patton (2002) described several different strategies for purposely selecting information-rich cases including extreme or deviant case sampling, intensity sampling, maximum variation sampling, homogeneous sampling, typical case sampling, critical case sampling, snowball or chain sampling, criterion sampling, theory-based sampling, confirming and disconfirming cases, stratified purposeful sampling, emergent sampling, purposeful random sampling, sampling politically important cases, and convenience sampling. Each of the 15 purposeful sampling strategies includes strengths and weaknesses; the researcher should select the strategy that most aligns with his or her research purpose (Patton, 2002).

Patton (2002) maintained that purposive sampling is in stark contrast to sampling in the quantitative approach. Quantitative inquiry focuses on large random samples with the purpose of generalizing from the sample to a population through statistical analysis. However, qualitative inquiry focuses on small samples with the purpose of in-depth understanding instead of generalizing findings (Patton, 2002).

Criterion sampling was used in this study. Patton (2002) described criterion sampling as studying cases that meet a predetermined set of criteria. Individuals in this sample met four criteria: (a) identify as being undecided about an academic major, (b) identify as being Latino/a, (c) identify as being a freshman or sophomore student, since colleges and universities often require a decision about an academic major by the junior

year (Gordon & Steele, 2015), and (d) in the process of changing the academic major at a 4-year, bachelor degree-granting institution of higher education. Regarding the number of participants, Patton (2002) stated, “There are no rules for sample size in qualitative inquiry” (p. 244). According to Lincoln and Guba (1985), the size of sample in purposeful sampling should be determined by redundancy in the data (i.e., saturation). Creswell (1998) recommended having 5 to 25 participants in phenomenological studies, with the ultimate sample size determined by data saturation. In this study, 11 participants were interviewed to reach data saturation.

As the researcher, I used my role as a career advisor and my network of professional advising staff to identify potential participants based on the criteria. I sent an email (Appendix B) to multiple colleagues who then forwarded the email to college students, explaining the study’s criteria, purpose, and requirements. Students who were interested in participating contacted me directly via email. I emailed them a participant demographic information sheet (Appendix C) and informed consent document (Appendix D), which fully detailed the study’s purpose and requirements. I followed up with each potential participant to ensure that he or she met the study criteria and arranged the time and place for interviews. Prior to data collection, I gathered the completed participant demographic information sheets and the signed informed consent documents from the participants and explained the strategy for ensuring their confidentiality (i.e., data coding; Merriam, 2009). Each participant selected a pseudonym for use in the study.

Data Collection

In qualitative research, including phenomenological research, the researcher is the primary instrument for collecting and analyzing data (Merriam, 2009). Thus, Lincoln and Guba (1985) recommended that researchers take time at the start of a study to write a personal disclosure statement describing their positionality. This statement helped me to reflect on my assumptions and biases (Lincoln & Guba, 1985). Merriam (2009) referred to this reflection process as *epoche*; it is included in my reflexive journal. Once this process was complete, I began to collect data.

Merriam (2009) and Smith et al. (2009) stated that the preferred method for collecting data in phenomenological research is through phenomenological interviews, which are semistructured, in-depth interviews with those who have direct experience with the phenomenon. These interviews allow for deep exploration of the phenomenon being studied by capturing descriptions of the lived experiences of the participants (Patton, 2015). I collected data through two separate rounds of individual, face-to-face, semistructured, open-ended interviews, using an interview guide (Appendix E). The first round of interviews was designed to gain insight into each participant's story and history and to build rapport. The second round of interviews was designed to learn about the participants' experiences as Latino/a college students who were undecided about academic majors. The interview guide (Appendix E) was used to facilitate the conversation but not to delimit it. The interview questions were designed to be informal and open ended, allowing participants to take their own direction and use whatever

words they wanted to express (Merriam & Tisdell, 2016). Probes and member checking were used to follow up as needed (Merriam, 2009).

Participants were encouraged to identify interview locations on campus where they felt most comfortable, while also allowing for audio recording (Merriam & Tisdell, 2016). Each interview began with a review of the purpose of the interview and a review of the informed consent document (Appendix D). First-round interviews lasted 30 to 65 minutes each and second-round interviews last 40 to 75 minutes. Typically, 1 or 2 weeks separated the interview rounds, depending on the participant's availability. In order to ensure accuracy, every interview was audio recorded and field note strategies were utilized. Immediately following each interview, I recorded key reflections and summarized the primary discussion points. Then I crafted memos (Appendix F) capturing my observations and reflections from the interviews and shared the memos with my committee chair as a peer examiner. This reflection process provided a basis for identifying follow-up measures with each participant.

After each interview was completed, the recording was transcribed into a Word document by a professional transcriptionist and I emailed the document to the participant for member checking. Member checking allowed participants to review the interview transcripts for accuracy, which enhanced the credibility of the findings (Merriam, 2009). If additional clarification was needed, participants were encouraged to edit the transcripts or notify me of necessary changes.

To aid with data triangulation, each participant responded to an open-ended questionnaire (Appendix G). This questionnaire was emailed directly to each participant

after he or she had completed the second round of interviews. According to Patton (2002), following interviews with questionnaires is a way to evaluate the extent and credibility of the data gathered in the interviews. The purpose of the questionnaire was to give participants an additional opportunity to describe or expand on their stories as undecided Latino/a students. I cross-checked the consistency of information between the two data sources (i.e., two rounds of interviews and the questionnaire) to gain a clear picture of the phenomenon being studied (Patton, 2002). Data collection consisted of 22 separate interviews yielding 390 pages of transcripts and responses to 11 open-ended questionnaires from the 11 participants.

Data Analysis

Patton (2015) detailed a step-by-step approach to transcendental phenomenological research: (a) *epoche*, (b) bracketing and phenomenological reduction, (c) horizontalization and imaginative variation, and (d) synthesis of texture and structure. First, the researcher must engage in a process called *epoche*, whereby the researcher explores his or her experiences in order to develop an awareness of personal viewpoints, assumptions, and prejudices (Merriam, 2009). Within the context of this study, I engaged in *epoche* by maintaining a reflexive journal. According to Lincoln and Guba (1985), the reflexive journal serves as a personal diary in which the researcher records information about self and method. In this journal I recorded my assumptions and biases, which allowed me to examine critically my viewpoints and prejudices (Lincoln & Guba, 1985). Following the *epoche* process, the researcher should temporarily set aside (bracket) his or her assumptions and prejudices, then begin the research study (Patton,

2015). To aid in bracketing, I utilized my committee chair as a peer examiner who read my journal and memos and engaged me in reflective conversations regarding my assumptions and biases (Merriam, 2009).

The next step in phenomenological research is phenomenological reduction, or the process of repeatedly returning to the essence of an experience in order to identify its meaning (Merriam, 2009). In horizontalization, all data are treated as having equal weight and laid out for examination (Merriam, 2009). In other words, all data have equal value during data analysis and the data are organized into themes. Finally, imaginative variation entails viewing the data from multiple perspectives in order to develop enhanced understanding of the themes (Patton, 2015).

To assist with phenomenological reduction, horizontalization, and imaginative variation, Smith et al. (2009) developed a method called interpretative phenomenological analysis (IPA). According to Smith et al. (2009), IPA is particularly useful when a researcher is interested in looking in detail at how an individual makes sense of a significant transition in his or her life (e.g., selecting an academic major). Studies that employ IPA commonly have a small number of participants and aim to reveal the essence of the experience of each participant (Smith et al., 2009). The most common form of data collection in IPA is semistructured interviews, the transcripts of which are analyzed through systematic, qualitative analysis: (a) reading and re-reading, (b) initial noting, (c) developing emergent themes, (d) searching for connections across emergent themes, (e) moving to the next case, and (f) looking for patterns across cases

(Smith et al., 2009). The researcher then develops an analytic description derived from a narrative account, which is created from transcript analysis (Smith et al., 2009).

Selecting IPA was consistent with the focus of the research question. The following is a description of each step in this process and how IPA integrates with the concepts of phenomenological reduction, horizontalization, and imaginative variation. The focus of this section is placed on analyzing interview transcripts; however, the same process was used when analyzing the open-ended questionnaire responses.

Reading and re-reading. The first step in IPA analysis is to immerse oneself in the original data (Smith et al., 2009). I read and re-read the transcripts from participant interviews and the questionnaires. I listened to the audio recording of each interview while reading the transcripts. Smith et al. (2009) stated that this part of the process is about slowing down and resisting the urge to summarize the information in a short period of time. The purpose is to ensure that the participant is the focus of analysis (Smith et al., 2009). I actively engaged with the data by repeatedly reading the information.

Initial noting. The second step in IPA is the most detailed and time consuming (Smith et al., 2009). I examined interview transcript content and language, while keeping an open mind (Smith et al., 2009). There are no specific rules regarding what should be commented on, since the goal is to create detailed notes on the data (Smith et al., 2009). Lincoln and Guba (1985) recommended coding the data (e.g., pseudonyms) to ensure participant confidentiality.

I deconstructed the data by fracturing the reading flow in order to understand the participant's use of words (Smith et al., 2009). The culmination of initial noting in IPA adhered to the processes of horizontalization and imaginative variation, as described by Merriam (2009) and Patton (2015). Throughout this step, I viewed each piece of data as having equal weight and value, in preparation for examining the data from various perspectives and organizing the data into themes.

Developing emergent themes. The third step in IPA focuses on a larger set of data, including the initial interview transcripts, the questionnaire responses, and the researcher's notes (Smith et al., 2009). The goal of developing emergent themes was to reduce the volume of the data while maintaining its complexity. In doing so, I identified relationships, connections, and patterns within the data (Smith et al., 2009). Sometimes the researcher may need to segment notes in order to turn them into themes, which are typically articulated as phrases that capture the essence of the experience (Smith et al., 2009). Line by line, I read through both rounds of interview transcripts and questionnaire responses by each participant and utilized a color-coding system to sort the data into emergent themes for each individual participant.

Searching for connections across emergent themes. The fourth step in IPA is mapping how emergent themes might fit together (Smith et al., 2009). Smith et al. (2009) suggested that the most basic form of identifying patterns among emergent themes is through a process called *abstraction*. Abstraction involves grouping similar themes and assigning a name to the theme cluster. I organized the color-coded themes

for each participant into tables, yielding 11 separate tables with interview and questionnaire response excerpts.

Moving to the next case. The fifth step in IPA involves moving to the next participant's interview transcripts and questionnaire (Smith et al., 2009). At this point, Steps 1 through 4 were repeated. Smith et al. (2009) warned that it is imperative for the researcher to view the next case independently (i.e., not allow previous cases to influence the process of analyzing a new case). I continued the process of analyzing new cases until data from all 11 participants had been reviewed.

Looking for patterns across cases. The sixth in IPA focuses on searching for patterns across cases (Smith et al., 2009). At this point, the processes of horizontalization and imaginative variation are important to consider (Merriam, 2009). Each case has equal value. In Step 6, I organized each participant's themes into higher-order concepts called superordinate themes, which emerged as patterns across all 11 participants (Smith et al., 2009). The result was a single table of subthemes (Appendix H), with each subtheme nested within a superordinate theme (Smith et al., 2009). This data analysis process revealed four superordinate themes, and each theme contained four to seven subthemes.

Data Reporting

Throughout the data collection and analysis process, I created an audit trail detailing the methods, procedures, and decisions made (Lincoln & Guba, 1985). The audit trail helped to ensure dependability and confirmability and assisted in the data reporting effort (Merriam, 2009).

Using phenomenological research as a methodology influences how data are reported. Smith et al. (2009) noted that the results section of an IPA study is more extensive and conversational than the results section of a quantitative study. Reporting the data included excerpts from interview transcripts and document analysis in order to provide an account of the data and to make a case for what the data mean (Smith et al., 2009). While reporting data, I provided enough description to contextualize the study (i.e., thick description) so that readers can determine the extent to which their circumstances match those in the study (Merriam & Tisdell, 2016). This effort should enhance transferability, which is discussed in the section entitled Quality Issues.

I included a table of subthemes and superordinate themes in reporting the data. It is important to show how superordinate themes exist for each participant, while subthemes are nested within the superordinate themes (Smith et al., 2009). My goal in data reporting was to present a clear, full narrative account of what I had learned from participants, while also being transparent with the data (Smith et al., 2009).

Quality Issues

In quantitative research, the standard criteria for establishing trustworthiness (i.e., rigor) are internal validity, external validity, reliability, and objectivity (Patton, 2002). In contrast, Lincoln and Guba (1985) outlined four criteria for establishing trustworthiness within qualitative, constructivist inquiry: credibility, transferability, dependability, and confirmability. Since these standards of quality underlie data collection, data analysis, and data reporting in qualitative inquiry, each criterion is detailed below.

Credibility. In qualitative research, credibility is addressed instead of internal validity. Credibility deals with how research findings match reality (Lincoln & Guba, 1985). While qualitative researchers do not pursue objective truth, Merriam (2009) maintained that a researcher can use any of several strategies to increase credibility of findings. For instance, triangulation may be used: data triangulation, investigator triangulation, methodological triangulation, or theory triangulation (Lincoln & Guba, 1985). *Triangulation* is defined as using multiple data sources, researchers, theories, or methods to strengthen a study (Patton, 2002). Another approach for ensuring credibility is member checking (i.e., soliciting feedback from interviewed participants; Merriam, 2009). Adequate engagement in data collection and peer review are additional strategies for ensuring credibility (Merriam, 2009). In this phenomenological study, I used data triangulation, member checking, and peer review as strategies to ensure credibility (Merriam, 2009).

Transferability. In qualitative research, transferability is used instead of external validity. Transferability deals with the degree to which findings from a study may be applied to other circumstances (Lincoln & Guba, 1985). Merriam (2009) cautioned that transferability can be easily confused with generalizability, as described from the quantitative paradigm. Within qualitative research, the goal is not to generalize in a statistical sense. Instead, what is learned through qualitative inquiry can simply guide other situations under similar conditions (Patton, 2002). To enhance transferability, Merriam (2009) endorsed using thick description (i.e., a full description of settings, participants, and findings) and maximum variation in the sample. In this study I used

rich, thick description with a hope to “provide enough description to contextualize the study such that readers will be able to determine the extent to which their situations match the research context, and, hence, whether findings can be transferred” (Merriam, 2009, p. 229).

Dependability. Dependability, instead of reliability, is used in qualitative research. Traditionally, in quantitative research, reliability refers to the degree to which findings can be reproduced, while dependability refers to the consistency of findings in qualitative research (Lincoln & Guba, 1985). Dependability is the degree to which results are consistent with the collected data (Merriam, 2009). In this study, dependability was enhanced through data triangulation, peer examination, reflexivity (i.e., critical self-reflection by the researcher), and an audit trail (Merriam, 2009).

Confirmability. In qualitative research, confirmability is addressed instead of objectivity. In qualitative research, the researcher serves as the main instrument (Merriam, 2009). To establish confirmability and validate the researcher’s decision-making process, Lincoln and Guba (1985) advised maintaining a detailed audit trail, including a thorough account of decision points, procedures, and methods, as well as a reflexive journal. I maintained an audit trail throughout the research process. Underlying confirmability is ethics. According to Merriam (2009), ensuring the trustworthiness of a study starts with how trustworthy a researcher is when carrying out the study. Therefore, the importance of the reflexive journal and peer reviewer in this study cannot be overstated.

Researcher's Role and Positionality

According to Merriam and Tisdell (2016), the researcher is the primary instrument for collecting and analyzing data within qualitative research. It was vital that I examine and understand the role that I played in data collection and analysis. It was important to explore my viewpoints, assumptions, and prejudices continually (Merriam & Tisdell, 2016). To aid in this effort, I maintained a reflexive journal and engaged my dissertation chair and committee members as peer examiners (Merriam, 2009). The following is an account of my context and assumptions, which served as limitations to the study.

I am a Caucasian male in my mid-30s. I cannot fully understand what current Latino/a undergraduate students experience when they attend institutions of higher education or when they select an academic major; however, I studied this student demographic throughout my master's and doctoral programs. I earned a Master of Science in Education degree (emphasis in higher education and student affairs) at Baylor University in 2009 and a Bachelor of Science in psychology at Texas A&M University in 2002. Currently, I serve as an Assistant Director in the Career Center at Texas A&M University; I have been working in career services for approximately 8 years. Specifically, I manage services targeted to undecided and undeclared students, including topics such as career and major exploration. My primary focus is to help students to discover academic majors and careers based on self-reflection and informed decision-making. As a career advisor, I value informed decision making when selecting academic majors, so I attempt to help students to understand their academic options. I also operate

under the assumption that students can select their academic majors but often lack the information needed to do so. As a current career advisor at the Texas A&M Career Center, I brought to this study a positional power dynamic over the participants, which could have affected the collection of data. In many ways, I can be viewed as an outsider with positional authority who was studying undecided Latino/a students.

Conversely, I am also an insider. During my time at Texas A&M University as an undergraduate student, I identified as an undecided college student (major-changer). Entering Texas A&M University in 1998, I was a biology major, a major that I had selected based on perceived family pressure. My mother was a registered nurse and my father was a dentist, and I had aspirations of attending medical school. I grew up in a household where undergraduate education was the minimal expectation, while graduate and professional school were the goal. However, as a sophomore, I began to doubt my decision regarding my academic major. I changed to General Studies for more than a year while I remained undecided about which academic major to select. Throughout this time, I experienced anxiety and worried about selecting the wrong major. I was afraid that I would eliminate career options based on the major that I selected; moreover, I did not want to disappoint my parents with my selection. Also, I began to doubt my desire to attend medical school. The result was an identity crisis. If I were no longer going to major in biology and attend medical school, who was I and what would I study? Discussing my concerns with my parents did not appear to be a realistic option, so I randomly enrolled in courses that sounded interesting. At that point in my life, I did not seek assistance from career advisors or academic advisors at Texas A&M University.

Ultimately, I selected psychology as my field of study, even though I did not desire to pursue advanced education in counseling. Instead, after graduating from Texas A&M University, I worked the management field for many years before returning to school to pursue a master's degree. While serving as a manager, I realized that one's undergraduate major does not necessarily dictate one's career. In essence, my undergraduate degree in psychology did not doom me to the life of a psychologist or therapist.

Throughout my time in the Texas A&M Career Center, I have assisted a large number of Latino/a college students who desired to change their initial major selection. However, based on my interactions with these students, I believe that the Latino/a student uniquely experiences being undecided in a way that I do not completely understand. I believe that Latino/a college students experience being undecided in a way that is different from what I experienced as an undergraduate student. While interviewing participants in this study, I shared my story with them in order to build rapport. So I can be viewed both as an outsider and an insider.

I hold the constructivist worldview. According to this worldview, I hold the epistemological assumption that reality is subjective and constructed by individuals (Creswell, 2009). My constructivist epistemology affects my theoretical perspective, which in turn affected the methodology that I used in this study (i.e., phenomenology), which had an impact on the methods that I selected and how I made meaning of the collected data (Crotty, 1998). In the end, I hoped to explore how individual Latino/a

college students experience being undecided, without attempting to generalize these experiences to a larger population.

Chapter Summary

This chapter identified the research topic of interest, articulated the purpose of the study, described the methodology that was selected, discussed the epistemological underpinnings of my methodology, and addressed how the methodology drove the way in which data were collected, analyzed, and reported. The purpose of the study was to explore the experience of being undecided about academic majors for Latino/a college students who are changing their academic majors. In order to do this, I selected phenomenological research, which is rooted in the epistemology and theoretical perspectives of constructivism and interpretivism. IPA was selected to drive the methods. Primary data collection methods included semistructured phenomenological interviews and an open-ended questionnaire. Credibility, transferability, dependability, and confirmability were used as criteria for establishing trustworthiness.

CHAPTER IV

FINDINGS

This chapter reports the findings, organized into three sections. The first section provides a summary of the methodology and methods. The second section describes the context of each participant. The third section reports the superordinate themes and subthemes that emerged from the data.

Summary of Methodology and Methods

The purpose of this study was to explore the experience of being undecided about academic majors for Latino/a college students who are changing their academic majors. One research question guided this study: *What is the lived experience of being undecided about an academic major for Latino/a college students at an institution of higher education?*

The study was delimited to the state of Texas. Texas is heavily populated by Latinos/as, who constitute 39% of the state's population (Pew Research Center, 2016b). Texas ranks second in the United States for total Latino/a population in a state; 87% of the Latinos/as in Texas identify as being of Mexican origin (Pew Research Center, 2016b). Participants were recruited from a public, 4-year PWI of higher education in Texas; no participants were recruited from other geographic areas.

Based on the purpose of the study and the research question, phenomenology was selected as the methodology. Data were collected through two separate rounds of interviews with 11 participants (six female, five male). Each participant also responded to an open-ended questionnaire following completion of the second-round interview.

Participants were selected utilizing criterion, purposive sampling (Patton, 2002). To ensure confidentiality, each participant selected a pseudonym for use in the study. Collected data consisted of 22 individual interviews, yielding 390 pages of transcripts, and responses to the open-ended questionnaire by 11 participants. IPA was used to aid in data analysis (Smith et al., 2009).

Participant Descriptions and Context

Eleven undergraduate Latino/a students were interviewed in this study. Six participants identified as female and five participants identified as male. Four participants identified as sophomores and seven identified as freshmen. All 11 participants identified as Latino/a and of Mexican origin. Seven identified as first-generation college students (approximately 50% of all Latino/a college students are first-generation students; Santiago, 2011). All 11 participants were changing their academic majors; they had originally selected majors from a variety of academic disciplines, including engineering, mathematics, meteorology, biomedical sciences, environmental studies, psychology, public health, biology, and journalism. The participants represented a variety of hometowns in Texas and Mexico. Table 1 provides an overview of participant information.

Alex

Alex was a 20-year-old sophomore male first-generation college student. He was born and raised in Mexico, just across the border from a small town in southern Texas. Growing up, he walked across the Mexico/U.S. border to attend school in the United States. His father attended school in Mexico and his mother did not continue beyond

Table 1

Participant Data

Pseudo -nym	Gender	Race/ethnicity ^a	Age	Class	Original major
Alex	Male	Latino (Mexican American)	20	Sophomore	Petroleum Engineering
Ana	Female	Latina	19	Freshman	Mathematics
Claire	Female	Latina	19	Sophomore	Meteorology
Diego	Male	Latino	20	Freshman	Civil Engineering
Isabella	Female	Hispanic/Latina	18	Sophomore	Biomedical Sciences
Karina	Female	Latina, Mexican	19	Freshman	Environmental Studies
Michelle	Female	Mexican American /Latina	18	Freshman	Psychology
Olivia	Female	Latina	18	Freshman	Public Health
Pablo	Male	Hispanic/Latino	20	Sophomore	Biology
Santana	Male	Hispanic/Latino	19	Freshman	Journalism
Sean	Male	Hispanic/Latino	18	Freshman	Electrical Engineering

^aSelf-reported. ^bAcademic major selected when entering college.

high school. Alex noted how different college is in Mexico and the United States; so he said that his father could offer advice regarding higher education. Alex received pressure from his mother to attend college. He quoted his mother as saying, “Do good in school, get good grades so that you won’t have to suffer like we did” (Interview 1). Alex’s

family did not have wealth when he was growing up. He described a time when his family did not have enough money to afford food, so his father traveled 3 hours to the United States to work and send money home.

Alex's original motivation for going to college was to earn a degree that would lead to a sizable income. In his opinion, there was no worthy career path that did not involve a college degree. Alex said that he would "just Google highest-paying jobs, highest-paying bachelor's" (Interview 1) when he was initially selecting an academic major. Ultimately, for Alex, college equaled the chance for financial freedom and opportunities that his parents had not had.

Alex's second-round interview was emotional. He had to pause a few times to compose himself. He had initially decided to major in petroleum engineering because his mother was not open to other majors. Alex wanted to please his parents and to obtain a high-paying career. Essentially, due to family pressure, Alex "didn't really question whether or not if engineering was right for me. I just thought that was the path I was supposed to take" (Interview 1). Furthermore, he believed that majoring in petroleum engineering would ensure employability with a safe income after graduation.

Alex was skilled in mathematics and science in high school; however, his college courses moved too quickly. "It was just too fast. Like people were understanding it, and I just felt like throughout the whole course, I just felt dumb, like behind, you know. Because everyone got it and I didn't" (Interview 2). His self-esteem was affected and he began to question his selection of major, causing "really bad uncertainty and anxiety of the future" (Interview 2).

Alex also spoke about how having a Latino name lowered his connections with other students and with company recruiters. “So I think if you’re Latino and have a really Latino name, it’s kind of hard for someone who is not Latino, for example Caucasian, to really have that connection with you” (Interview 2). Alex said that he was sad because he had had high expectations upon entering college, then engineering was not something that he was capable of pursuing or something that he was still interested in pursuing. He desired to be proud of his academic major. He spoke about needing to graduate from college quickly, stating that he cannot afford to add a year or two to his rising academic debt.

Ana

Ana was a 19-year-old freshman female. She was born in a city located in the Rio Grande Valley in south Texas but grew up in a major city in south central Texas. Ana did not identify as a first-generation college student. Both of her parents were first-generation college students who had graduated with bachelor degrees. Her father was an executive vice president of a bank and her mother was a social worker and fraud investigator. Ana’s *madrina* (godmother) had completed a doctoral degree and had been an inspiration in Ana’s life. “Everybody in my family has a degree or is going to school” (Interview 1).

Ana decided to attend college to be successful someday. “My parents went to college, and they’re so successful. And you know, I see everything they’ve accomplished, so why wouldn’t I want the same thing for myself?” (Interview 1). Ana also stated that her desire was to become more successful than her parents. “If it’s in my

life story to have kids and have a family, how can I give them what my parents had given me, you know, like my parents had given me everything, like how can I beat them” (Interview 1). That being said, she also talked about how her family believed in traditional male and female roles. For instance, Ana maintained that “in my household, and I would like to say in my family, a woman’s job [is to] be at home, wife, cooking, cleaning, provide for her family, like just be a mom” (Interview 1). However, Ana also talked about how her *madrina* completed a doctoral degree and started a family afterward, which inspired Ana. As a result, Ana planned to complete college and get a job so that she could provide for her future family, in alignment with her current family’s values.

When applying for school, Ana considered multiple options for her academic major. Initially, she considered studying science education or bioenvironmental science to become a teacher; however, her mother discouraged her from doing so. “Because I’m Latina, because I speak Spanish, because I have such high grades, she [mother] wants more from me. And I guess she knows I have much more potential than being a teacher” (Interview 1). On the other hand, Ana’s father was supportive and wanted Ana to select a major that she genuinely wanted to pursue.

The first major that Ana selected was mathematics because it could be an easy gateway major into engineering. While in high school, Ana completed multiple internships in the oil and gas industry, which turned into a source of pride for her mother. Ana said that her mother was proud and boasted to others because Ana “wanted to break barriers, you know, Hispanic, a Latina in a White man’s job or career field”

(Interview 2). Yet, Ana did not enjoy engineering and did not want to major in mathematics. In order to please her mother, Ana changed her major from mathematics to biology so she could pursue medical school. Ana admitted, “I only wanted to go to medical school because they make a lot of money” (Interview 2).

I know I want to go into education, but I don’t want education as a major. I want to teach high school sciences because I have a deep, deep love and compassion for science. So I’m just sticking with bio for now, but honestly I hate biology; it’s not what I want. I want more of an environmental science kinda thing. (Interview 2)

Nonetheless, Ana was reluctant to change to the bioenvironmental sciences major due to pressure from her mother to stay in biology.

Ana expressed concern regarding a change of major to bioenvironmental sciences due to racism that she had experienced on and off campus. “I am the only dark-skinned person in that entire [bioenvironmental sciences] class; everybody else is White, blonde hair, blue eyes” (Interview 2). Ana stated, “Sometimes, I feel like it would be easier here at [school], especially in a STEM major, to be White, and then I wouldn’t have such a hard time in a lot of my things” (Interview 2). Ana felt isolated, alone, and uncomfortable in her science classes. She stated that being undecided and Latina caused her to be depressed; moreover, her ethnicity felt like a burden that was affecting her ability to pursue her potential career and academic major goals.

Claire

Claire was a 19-year-old sophomore female. She did not identify as a first-generation college student. Claire was born and raised in a major city in south central Texas. She described growing up in “literally a house divided. I am dealing with modern White men, and then I’m dealing with the Hispanic side, too” (Interview 1). Claire’s father is a Certified Public Accountant and fits the mold of “the stereotypical White male” (Interview 1), while her mother is from Mexico and did not complete high school. Claire did not meet her paternal grandparents but knows that both attended college. There is a long family history of people attending college on her father’s side of the family. On the other hand, Claire said that her family in Mexico has not had the opportunity to attend college. Her mother has 12 brothers and sisters, resulting in Claire having more than 75 cousins on her mother’s side of the family, which Claire considered to be a traditional Catholic family.

Claire’s father had placed pressure on her to attend college, yet she talked more about how education is an opportunity. “I knew that I had to take advantage of all of these opportunities—not even take advantage of it—like just do it because my family on that side just doesn’t have these opportunities in Mexico” (Interview 1). Claire felt blessed compared to her family in Mexico. She stated, “My family that lives in Mexico, they deal with the drug cartels, and they deal with people coming onto their property threatening to kill them. And I feel like I have such an advantage in America” (Interview 1). Claire said that she wanted to provide for herself and become independent.

Her mother was dependent on her father and Claire was fearful that her mother could be deported to Mexico if her father passed away (her father was in poor health).

Claire also stated that family members looked up to her. She wanted to set a good example for them by attending college. Initially, Claire had selected meteorology as her academic major. The interest in meteorology originated in the third grade, after she had watched a movie called *Twister*. Claire recalled enjoying the Weather Channel as a child. She described being skilled at mathematics and science. Unfortunately, her interest in multiple sciences made it difficult for her to select a specific major.

Claire was worried about not being able to decide on an academic major. “I don’t know what I’m really doing, I feel like I’m going through all of these classes like aimlessly trying to decide what I wanna do in college” (Interview 2). In her opinion, the correct major would allow her to have an enjoyable career in which she would excel.

Claire talked about needing to “embrace who I am” (Interview 2). “In the sciences, you’re expected to be like . . . I don’t know how to describe it, you’re expected to be White, and you’re expected to just be smart and know what you’re doing” (Interview 2). However, Claire felt that she could do well in the sciences, too, as a Latina. She concluded the second interview by stating,

I feel like in America, these White Americans think that they’re the only people who can accomplish the sciences, but I think that everybody, people of color as well, can do this, too. And I need to embrace and understand that I’m just like them, too, and I can do this as well. (Interview 2)

Diego

Diego was a 20-year-old freshman male who identified as a first-generation college student. He was born in Mexico and his family had relocated to a large metropolis in southeast Texas when he was 6 or 7 years old. Diego described the move to the United States as “moving from a small town to a big city, changing language, changing culture, and that kind of thing” (Interview 1). His family was not wealthy but they were not poor. Diego described his family as hardworking, connected, attached, and important to his life. His father began as a construction laborer and ultimately became a contractor after rising in the company. Diego recalled that his family once visited a “nice part of town, you know. We would go around and see the houses, and I would say, ‘Like, man, look at those houses, and if one day I could have enough money to supply that for my family’” (Interview 1).

Diego viewed going to college as an opportunity for self-growth and societal impact. He grew up in Mexico and witnessed inequalities, which prompted him to say, “So what’s the point of having all those benefits [in the United States] if you’re not gonna use them to improve, not just yourself, but like I said, it reflects back on society” (Interview 1). Diego grew up in an area where he was exposed to others who relied on drugs and gangs. “I know that there’s drugs and gangs, and then there’s all these even worse things out there. But you know, it’s just a matter of like trying to stay away from that” (Interview 1). For Diego, education was a way to keep himself away from bad influences. His family instilled in him the need to “work hard and stay on the right path” (Interview 1).

Diego longed to become an engaged citizen who discovered his passion during college and pursued it as a vocation. He wanted to attend college to make his parents and siblings proud, as well as develop himself into a person upon whom they could rely. He wanted to find a good job to serve as a resource for his family, in case the need should arise in the future. Furthermore, he wanted to make an impact on society.

Diego initially selected civil engineering as his academic major. His primary reasons for selecting engineering were encouragement from a high school statistics teacher who believed that Diego was skilled in mathematics, and Diego's belief that engineers had good-paying, secure jobs and performed important work. Diego had experience working as a construction laborer, which specifically led him toward an interest in civil engineering. He thought that a degree in civil engineering would provide him the opportunity to graduate quickly and begin to earn a living. "In four years I could get out of college and start working and earning money, then I could not only just help myself, but I could also help my family" (Interview 2).

Diego performed well in his engineering classes but decided that engineering was not his passion. "I noticed that engineering was simply not made for me" (Interview 1). Instead, he was considering law school but was undecided about his future. He stated that his experience of being Latino and undecided was difficult.

Being Latino, I don't think about it all the time, but I do realize that being in this situation that I am, which is being a first-generation student, not having . . . I mean, I think I said this last time, but not having that lawyer dad and doctor mom, or nurse mom and engineering dad or that kinda thing, it doesn't provide

me with much security as much as maybe, you know, White students would have. Where if everything fails here, which hopefully it doesn't, and I shouldn't . . . I certainly don't wish it for anyone, but if everything goes down, at least maybe they don't have to worry too much, since their parents can provide for them in the long run. (Interview 2)

Diego expressed that being undecided made him uncomfortable. He desired to select a new major quickly because he was funding his education independently. Diego described his experience as “not having a safety net to fall back into” (Interview 2).

Diego did not agree that being Latino was a disadvantage when selecting a major and career. He was quite proud of his heritage and background. Nonetheless, he felt that “being Latino is specifically, it makes it just a little bit more delicate to be in that kinda situation [undecided], because maybe we don't have all the resources that we would like to have” (Interview 2).

Isabella

Isabella was an 18-year-old sophomore female. She did not identify as a first-generation college student. Isabella was born in a large metropolis in north Texas but her family relocated to a city in deep southern Texas, which Isabella described as a predominantly Latino/a and Catholic area next to the border with Mexico. Isabella's father was a medical doctor and her mother stayed at home. Both parents had attended college but her mother did not graduate, whereas her father also completed medical school. Isabella grew up knowing that attending college was the expectation, since both of her parents had attended college. “[Going to college] was just in a sense mandatory, I

guess you could say. It was just really the big decision of where I wanted to go and what I wanted to do” (Interview 1). Isabella mentioned that both of her parents had grown up in low socioeconomic areas and that her father had worked very hard to change his life. In fact, her father called Isabella spoiled and she jokingly said that he had spoiled her by working so hard.

Isabella’s initial major when applying to college was biomedical sciences. Her father was a medical doctor and she was interested in the medical field. However, her father influenced her decision to change from biomedical sciences and medicine. He wanted her to pursue something other than medicine because, in his opinion, not as much money was available in the medical field anymore. Following her father’s wishes, Isabella changed majors from biomedical sciences to economics. She selected economics because “a degree in Economics would offer me an array of options for careers, ranging from politics to law school to financial advising” (Questionnaire, Q1). Yet she was questioning her decision regarding the change to economics. “I am now in the process of deciding whether I want to take pre-med requirements with my current major [economics], switch back to BIMS [biomedical sciences], or change to a major similar to BIMS” (Questionnaire, Q2).

According to Isabella, her parents were stereotypically Latino/a and Mexican American but she did not fit the stereotypes (i.e., low-income and Spanish speaking).

My parents were the stereotype, but I wasn’t, so it’s harder for me to try and work past it because I never experienced it, but knowing that they did gets me to

think that I can't go backwards, like I have to keep moving forward and not have that for my children and their children. (Interview 2)

In her home town in south Texas, people considered Isabella to be White because she did not speak Spanish and came from a wealthy family. However, at college, Isabella was considered Latina, which is the term she preferred. Isabella described her transition to college as awkward because she was not attempting to work herself out of a bad situation and did not want to fit Latino/a stereotypes. She said, "I get to make these decisions [about major] because I'm passionate about what I love, and I don't have to make the decision to do something for the money the way [my father] had to" (Interview 2).

Isabella was struggling with indecision about her academic major. She found multiple majors to be of interest and had difficulty in describing her likes and dislikes. Isabella wanted to select a practical major, which she viewed as a major that led to more options for higher-level career choices. Despite her father's opinions regarding the career direction that she should select, Isabella described the selection of a major as her decision. "I'm in college and realizing that it's my decision, and not someone else's" (Interview 2).

Karina

Karina was a 19-year-old freshman female who also identified as a first-generation college student. She was born and raised in a large metropolis in north Texas, whereas both of her parents were born and raised in Mexico. Neither of her parents had attended college. Instead, her father had attended trade school to become a teacher in

Mexico and her mother did not progress past elementary school. After moving to the United States, Karina's father became a restaurant chef and her mother became a babysitter and house cleaner. Whenever possible, her mother "would take one of us to help her clean, and they always said 'we take y'all so y'all can see what it is like doing cleaning like the residences of other people'" (Interview 1).

According to Karina, her parents "kind of engrained it into our head that we were going to go to college" (Interview 1). Her parents would have been disappointed if Karina had chosen not to pursue higher education. They wanted Karina and her sisters to stay in school so they would have better lives than their parents. Essentially, Karina's parents moved to the United States to provide opportunities for their children. Karina felt that "we owe it [going to college] to them for coming over here and drastically changing their lives and risking themselves" (Interview 1). Karina was attending college because she felt that she owed it to her community to pursue higher education. During high school, Karina had mentored elementary children through a program called Peer Assistance and Leadership (PAL).

Some kids that were like me, that I saw myself in them, that were Latino/Latina.

Some of them were struggling, some of them were not, and I just felt like I owed it to them so they could see that someone like them could actually go on to do more stuff. (Interview 1)

Throughout the first interview, Karina talked about her desire to pursue higher education to give back to her parents and community.

Initially, Karina had wanted to major in either journalism or education; however, she “ended up choosing environmental studies because I knew that it had more chance of making more money if I went into this major than if I went into teaching” (Interview 2). She had enjoyed high school advanced placement (AP) environmental science courses and she liked the teacher, which influenced her decision to select environmental studies. Yet Karina also admitted that she was not skilled in mathematics and science. She was not performing well in those college courses and was no longer enjoying her major. She “realized that it is more important to love what you are doing with your time and life instead of doing something just for the money” (Questionnaire, Q2). As a result, she wanted to change her major and felt stressed, anxious, and depressed due to her indecision regarding what major to select.

My pride and fear really impacted my decision to select a new major. I didn’t want to seem like I couldn’t do what I said what [sic] I was going to do. And I didn’t want my family and friends to think I was dumb or that I give up easily. (Questionnaire, Q3)

Karina was afraid of what her parents, family, and friends would think about her desire to change majors, since her parents originally came to the United States from Mexico to provide her with a better life. She was trying to set an example for others but her indecision negatively affected her self-image as a role model.

Karina became emotional and cried during her second interview. She discussed experiencing culture shock when attending college. “Mostly my [environmental studies] classes are mostly White people” (Interview 2). Karina was raised in a predominantly

Latino/a and African American community, where she felt like a member of the majority. Therefore, she admitted, “Not seeing people that looked like me [in class] was kind of off-putting” (Interview 2).

Michelle

Michelle was an 18-year-old freshman female who also identified as a first-generation college student. She was born and raised in a city in deep southern Texas, located across the border from Mexico. She stated firmly, “Definitely family, that’s the biggest thing in my culture” (Interview 1). Michelle shared that, when she was very young, her father had lost his job because he did not have a college degree. As a result, the family was homeless for a while and did not have a stable income.

Michelle stated that college was difficult for her because she did not have anyone from her family to assist her through the experience. She stated that college is “a short-time suffering for a long-time term of peace” (Interview 1). She had entered higher education because of the opportunities that college could open up for her but she said that she felt selfish for desiring to attend college. Ultimately, she was attending school to obtain a degree, then move back home to help her family in southern Texas. By going to school, Michelle wanted to “actually get a career, not just a job, a career actually making better money so I can help them [family] out more” (Interview 1).

Michelle’s second interview was quite emotional; she began to cry about 30 minutes into the interview. She said that she had not placed much thought into her first selection of a major, which was psychology. The ability to earn money was her primary motivator; besides, she had accepted advice from friends and peers who suggested that

she major in psychology. However, Michelle was not passionate about psychology. She was also considering a major and career in something related to business but her indecision was causing pressure and headaches. She felt burdened to make quick decisions and graduate within 4 years due to a lack of funding and family support. “I was like freaking out because I’m like, ‘What am I gonna do, I’m running out of time’” (Interview 16).

Michelle described coming to college as a culture shock.

Yeah, so I mean back home, I’m surrounded by Latinas, you know, Latinos. So when I came here, it was definitely a big cultural shock for me. It became more obvious to me, you know, that I was a minority here; it wasn’t the same as back home, so definitely a lot of changes. And I started realizing that as a minority, you just start feeling left out, in a sense. (Interview 2)

Michelle said that it was difficult, as a Latina, to pursue a major in business. She had experienced racism from business students due to her accent and culture.

I can’t get into these opportunities, I won’t have these opportunities, because you know, I’m a Latina. Seeing the way how the other majority of people here treated me, it was like I was useless, you know, I didn’t matter, and I just wasn’t . . . I don’t know how to put it into words, but like I wasn’t up to their standards. I don’t know how you explain that. But that’s why I was just like, “Okay, why am I looking into these kind of programs, you know, I can’t be on the same level with them.” (Interview 2)

Ultimately, she said, “I can’t let me being a Latina get in the way of what I wanna do” (Interview 2).

“I need to get into my major soon, I need to start taking those courses, and I need to start, you know, knowing things, so that way I can be on the same level as these other people” (Interview 2). Family and friends told Michelle to select a major for which she has a passion; however, she did not feel that she could afford to pursue her passion. Again, financial stability was a primary driver for Michelle to attend college, and her parents were not assisting her with the cost of attending school. Michelle shared that she was short on time and felt pressured to identify a major and career as soon as possible.

Olivia

Olivia was an 18-year-old freshman female who also identified as a first-generation college student. She was born and raised in a city in central Texas; however, both of her parents were originally from Mexico. Olivia’s mother completed high school in the United States and her father dropped out of high school. According to Olivia, her father was a constant encouragement and “put it in my heart to go [to college]” (Interview 1).

Olivia had selected public health as her major because she originally planned to attend medical school. She had formed the idea of becoming a doctor herself, which was a decision that her father supported fully. She desired to become a doctor to help others. She also spoke about the aspiration to get a job someday and buy a decent house for her parents. Yet, she was not excited or passionate about public health and admitted to being undecided about her major and future.

Olivia spoke about having family members in Mexico who did not have the opportunity to pursue higher education. Being undecided about her major “makes me feel just a little selfish” (Interview 2).

I feel really blessed that I did receive a great gift just because, like my cousins, they’re not really pursuing higher education, or they just don’t have the money to do it. And sometimes I just wanna work, and I just feel like being a Latina and actually coming here, like that’s a great thing. But kind of for me to be undecided, I also feel like I’m taking advantage, in a way, just because I feel that, if my cousins were here and if they had the opportunity to come here, they would know exactly what they wanna do. But I don’t really know exactly what I wanna do. (Interview 2)

Olivia did not want to make the wrong choice of an academic major. “I don’t want to be blinded about making my goal just to make a lot of money, if that makes sense. I really just wanna choose a major that I really enjoy” (Interview 2). Olivia said that she hoped to select a major that she would apply in the workforce someday.

Olivia stated that, being undecided, she was not taking full advantage of her educational opportunity; but she was sure that she would eventually make a decision. “I don’t feel like I’m grabbing the opportunity, if that makes sense. But I mean I do know that I’m going to choose something, and I’m going to love it, and I’m going to hopefully go through with it” (Interview 2).

Olivia spoke about a desire to fulfill God’s purpose in her life. She wanted to get a good job with her academic major and help people who needed her assistance. In

addition, she wanted to set an example for her family so that others would pursue higher education. “I hope to be kind of like a light for my brother that school is definitely necessary” (Interview 2).

Pablo

Pablo was a 20-year-old sophomore male who also identified as a first-generation college student. He was born in a large metropolis in northern Illinois but his family had relocated to a city in north Texas when he was 10 years old. While in Illinois, Pablo grew up in a predominantly Latino/a community and Spanish was his primary language. According to Pablo, his parents “came to the United States with lower education. So I’m a first-generation college student, and my parents are working class” (Interview 1). Following his parents’ divorce, Pablo’s mother moved the family to Texas in order to leave “a really not-so-friendly neighborhood” (Interview 1).

Pablo originally selected biology for his academic major so that he could become a medical doctor. “When it came time to pick an academic major for university, I decided biology would be the best choice for me in order to reach the goal that was imposed onto me” (Questionnaire, Q1). Becoming a doctor was not Pablo’s idea. Instead, everyone in his family had wanted Pablo to become a doctor.

Basically, my parents and my whole family, they were always like “Yeah, [Pablo] is so smart. Like he’s gonna grow up to be a doctor.” And I was always like, “Yeah, I’m gonna grow up to be a doctor.” So I never really had the opportunity to explore career choices. (Interview 1)

Pablo's primary motivation for attending college was to get a high-paying job so he could provide for his mother and family. He said, "The leading factor to coming to a higher institution is to basically have a better life than I had growing up for my children" (Interview 1). Pablo described his mother as his inspiration, expressing a desire to take care of her after he completed the college degree. He spoke at length about how a college education provided an opportunity for social movement for himself, his mother, and his future family.

A lot of Latinos are first-generation college students because our parents have come from Hispanic or Latin countries. And they've come in order to give their children better lives. And that's not to say that every single Latino or Hispanic is a first-generation college student, but like in my organization I'd say 95% are first generation. So we all have basically the same goal, like we talk about why we came to university, and we go around the table, and the majority answer is money, but obviously money leads to social movement, you know. So I'm not alone in just saying that I'm coming to university for social movement. Like as a first-generation college student, that's what it is to me. (Interview 2)

However, Pablo drew a distinction between himself and other students. "A lot of Latinos or Latinas are first-generation college students, that doesn't mean that they don't know what they wanna do, you know. They obviously have passion and drive. Then there's me" (Interview 2). On the one hand, he described being a first-generation college student as similar to walking through a dark room with objects everywhere. He felt that he was randomly bumping into obstacles to his progress through college. On the other

hand, he described being undecided as “walking through the dark room with your eyes closed” (Interview 2). Being undecided about his major added a layer of difficulty to an already challenging experience for Pablo.

Pablo did not enjoy his science coursework and felt academically unprepared to be a biology major. He said, “So calculus, chemistry, and biology are like the unholy Trinity” (Interview 1). In addition, he never really wanted to be a doctor. After deciding to change majors, Pablo realized that he had never had the opportunity to discover what he enjoyed doing or studying, which made it difficult to select a new major. He expressed feeling pressure to select a new major quickly because his family could afford to pay for extra time in school. “They’re not worried about staying an extra year or whatever because they can afford to do that, you know, like they have the opportunity to do that, which is great. But me personally, I don’t have that opportunity” (Interview 2).

Santana

Santana was a 19-year-old freshman male. He did not identify as a first-generation college student. Santana was born and raised in a town in deep southern Texas. “I lived in a town that was basically 5 minutes away from the border. I could accidentally walk into Mexico, that’s how close it was” (Interview 1). His father was born and raised in Mexico; both parents attended college but neither had graduated with a degree. Santana’s high school was related to a community college, so he began to take college courses as a freshman in high school. As a result, he started as a freshman in college with approximately 60 credit hours already completed.

According to Santana, his parents expected him to attend college but “I’m not even too sure why I’m here, I’m just kinda here because I know that’s the way to become successful, is higher education” (Interview 1). He chose to major in journalism “primarily out of a whim as it was my backup to my backup to my backup [sic], which isn’t something that I’m proud of to acknowledge” (Questionnaire, Q1). Originally, Santana grew up wanting to become a psychiatrist, then a doctor, then a nurse; he finally decided to pursue journalism.

Santana stated that his family played a large role in his major and career selection. His *tia* (aunt) was a journalist and both of his siblings also considered a career in journalism. However, his parents had high expectations for Santana and wanted him to become something “important,” such as a chemical engineer or doctor. He shared a story about his *tio* (uncle) expressing disappointment when Santana selected journalism as his academic major.

Santana said that he experienced an identity change in college. “I kind of left high school thinking that I knew who and what I was. But I think after my first semester here [in college], going back home for a month, I kinda realized that I didn’t” (Interview 1). Santana no longer enjoyed his journalism coursework and wanted to change paths. “I hate the direction I decided to chase. It’s not fun and the parts that I’ve always found important in writing—the details—are missing in journalistic writing and that hurts” (Questionnaire, Q2).

Santana had experienced indecision about his major, which made him feel worried and stressed.

It's mainly just my indecisiveness, because I'm worried about okay, so if I go into this field, am I gonna like it at the end? And if I don't like it, then how much time do I have left to change it again? And I don't really have the time to be constantly changing it because again, I came in with 60 hours. So I have maybe like two more chances to switch it, but at this point I really just wanna know, and that's what really killing it for me because I'm the type of person who needs to know how something is gonna happen, or else I'm gonna worry about it and overanalyze and stress about it. (Interview 2)

Santana felt that his life was moving too quickly. "How fast everything has been moving, that I need the answer like now. I mean even if I did have time, I probably wouldn't be able to figure it out entirely, but I'd feel safer with time" (Interview 2). Santana admitted that he did not know himself, his interests, or his abilities. He knew students who had experienced fulfillment in their majors and he considered his indecision to be a barrier to his future success.

Santana reported that he had experienced culture shock in the transition to college. "So because my town was like 5 minutes away from the border, they were mostly Mexicans and Hispanics" (Interview 1). "But when I came here [to college], I saw my first legit Black person . . . and like half the population here is White, so that was also a big shock to physically see" (Interview 1). Nonetheless, Santana said that college was interesting because it was different from his home and that the people whom he encountered in college were more willing to talk to him than were people back home.

Sean

Sean was an 18-year-old freshman male who also identified as a first-generation college student. He was born and raised in a city in deep southern Texas, located across the border from Mexico. Growing up, Sean was surrounded by Mexican culture and his parents grew up in “the stereotypical large Mexican family” (Interview 1). Both of his parents had joined the U.S. military and assimilated into White culture. Neither had attended college but they encouraged him to attend so that he would not end up like them (working too hard). Sean hoped to earn a college degree, then move back to work in his home town in order to help the area, which was impoverished.

Sean’s parents did not teach him how to speak Spanish. As a result, he was bullied for not speaking Spanish well. In fact, even though he was Latino and identified as of Mexican origin, his high school friends called him White because he did not speak Spanish and had a lighter skin tone. Sean remarked, “It’s either I’m too White for Hispanic culture, or I’m not White enough for the culture that we’re in right now [in college], which is predominantly White” (Interview 2).

Sean originally selected electrical engineering as his academic major because his brother had told him to do so after watching a science fiction movie. Sean grew up watching *Myth Busters*, YouTube videos, and media outlets, all of which portrayed engineering as enjoyable. However, he did not enjoy his engineering courses and his grades suffered. As a first-generation college student, his parents could not help him to explore majors and careers. Sean was told, “Just go to college, you’ll figure out everything there” (Interview 2). Unfortunately, he did not know what majors were

available at his institution and he did not know what he wanted to do for a living. “I can’t make decisions on my own because all the decisions that I make are wrong” (Interview 2).

Sean said that he needed to live up to the expectations of his family but having poor grades was very stressful. He was fearful of selecting an incorrect major, which would negatively affect his future employability. He spoke about mental health issues that he had experienced in high school. His previous issues had prompted him to explore the field of psychology but he stated, “I think I’m interested, but it could be engineering all over again” (Interview 2).

Themes From Participant Experiences

The analysis of first-round interviews, second-round interviews, and responses to open-ended questionnaires revealed four superordinate emergent themes, each with four to seven subthemes. In this section, each theme is presented, with excerpts from participant interviews and questionnaires. Table 2 provides an overview of all superordinate themes and subthemes.

Motivators for Attending College

Participants consistently discussed factors that had initially motivated them to attend college: family influence, social movement, career preparation, education as an opportunity, and challenging gender stereotypes. Each motivator set the tone for examining the lived experience of being undecided about an academic major for Latino/a college students. Understanding each motivator aids in developing a clearer picture of participant context.

Table 2

Research Themes and Subthemes

Superordinate themes	Subthemes
Motivators for attending college	Family influence Social movement Career preparation Education as an opportunity Challenging gender stereotypes
Selection of original major	Family pressure Financial stability Employability Lack of exploration
Reasons for indecision	Changing priorities Racial and ethnic issues Lack of self-awareness No passion for original major Academic ill-preparedness
Impact of being undecided	Feeling lost and alone Worried about future Shame and selfishness Pressure to be a role model Stressed for time Fear of selecting the wrong major Coping strategies

Family influence. According to Diego, “In terms of all Latinos being connected to their family, at least the people that I know, I mean we all have like a really deep connection with our families” (Interview 2). Regardless of whether or not a participant was a first-generation college student, he or she described how family members were instrumental in the decision to pursue higher education. For instance, Alex stated, “I never really questioned about going to college, it was kind of like the absolute next step I had to do . . . basically I was expressing what my mom thought, that not going to college

was just a mistake” (Interview 1). Similarly, Claire said, “[My dad] put a lot of pressure on me to go to college” (Interview 1), and Isabella said, “[My parents] both had a really big influence on me wanting to go to college, needing to go to college is more of it [Going to college] was just in a sense mandatory” (Interview 1). Karina shared, “[My parents] always said ‘Well, there’s no other option other than college, you have no other option, you have to go’” (Interview 1). Sean said, “I knew I wanted to go to college because both my parents don’t have college education, and they would always tell me, ‘You need to go to college’” (Interview 1). In each of these instances, participants talked about receiving parental pressure to attend college, as well as having the feeling that college attendance was mandatory instead of optional.

Participants reported that their families were encouraging them to attend college, rather than applying pressure. For example, Olivia said, “My dad always encouraged me, he always supported that, and I’m very thankful that he always put it in my heart to go [to college]” (Interview 1). Ana shared that she felt motivated to attend college due to her family’s success.

It was like there was no other option but college. I wouldn’t say that my parents kind of forced it upon me, but it was kind of like a self-driven thing, like my parents went to college, and they’re so successful. And you know, I see everything that they’ve accomplished, so why wouldn’t I want the same thing for myself kinda thing. (Ana, Interview 1)

Diego and Karina also expressed a personal desire to make family members proud by attending college.

[My parents] raised me up as best as they can with the limited resources that they have. So I wanna make them proud because, not just to say vaguely, make them proud. Well, it's so that they can see there the fruits of their work that, you know, it was worth something. (Diego, Interview 1)

Similarly, Karina shared,

I try to imagine myself doing something else that wasn't college, and I just think about how disappointed my parents would be . . . we feel like we owe it to [our parents] for coming over here and drastically changing their lives and risking themselves. (Interview 1)

Overall, family influence for participants to attend college is an important finding because participants felt compelled to enter higher education. Participants owed it to family members to pursue higher education; however, they were undecided regarding their academic majors, which led to feelings of shame about unmet family expectations. The feeling of shame is discussed in the section on the superordinate theme of the impact of being undecided.

Social movement. In addition to family influence to attend college, participants described higher education as a way to improve socioeconomic status. Participants wanted to attend college in order to advance their personal financial situations and provide social movement for their families and communities. The following is a description of how participants stated that attending college could provide social mobility for self, family, and community.

Self. According to Pablo, “We all have basically the same goal, like we talk about why we came to university, and we go around the table, and like the majority answer is money, but obviously money leads to social movement” (Interview 2). This sentiment was indicative of several participants, especially the first-generation college students. For example, Sean described himself as “a poor-class person trying to work his way up to middle class” (Interview 2). Alex captured the notion of desired personal social movement:

The reason why I’m attending college is I do not wanna have financial problems in the future. I don’t wanna basically go through what any of my family went through, you know, having trouble with money and money being scarce . . . like yeah, basically going to college just to have financial freedom and, you know, opportunities that maybe my parents didn’t have. (Interview 1)

Karina shared that her mother had been a house cleaner and had Karina accompany her when cleaning homes in order to encourage a desire for social movement. Karina said that her father’s thought process was, “‘You come here [to the United States] for a better life, and you just move up in the world,’ you know? So I guess that was my thought process” (Interview 2). Michelle said, “The biggest thing for me to get my degree is just not to struggle financially anymore” (Interview 1). All in all, among the first-generation Latino/a college students, there was a shared hope that pursuing college could enhance their personal financial situations.

However, the desire for personal social movement was not unique to first-generation participants. Isabella and Claire also discussed their desire to surpass their

parents. Isabella grew up in a wealthy family. “My dad worked so hard to get out of his position and his stereotypical situation that I need to work just as hard to continue moving up and not moving backwards” (Interview 2). Likewise, Claire grew up in a family that was not considered impoverished. She said, “I wanted to go to college and I wanted to be successful. And my mom is a stay-at-home mom, she doesn’t have a job, and I just didn’t wanna end up like that” (Interview 1). Claire wanted to be able to provide for herself and not rely on others financially.

Family. According to Michelle, “Definitely, family, that’s like the biggest thing in my culture” (Interview 1). Participants described the desire to attend college in order to enhance social movement for their current and future families. For instance, Diego, Karina, Michelle, Olivia, and Pablo talked about the wish to provide financial support for their parents and family members.

Financially supporting one’s current family was a prevalent subtheme among first-generation college students. They shared statements such as, “You can go to college for 4 years, get your degree, and then you can come back and help [family] more in which you would’ve been able to if you didn’t have a degree” (Michelle, Interview 1), and “Ultimately, my career, I would like for it to be able to provide back to my family. . . . My mom always worked hard for us . . . and I just wanna take care of her when she’s older” (Pablo, Interview 1).

Karina stated that she “wanted to do for [her parents] what they did for me, support them so they didn’t have to work like bust their butt anymore” (Interview 2); Olivia also expressed a specific goal of purchasing a home for her parents: “I want to get

like a pretty decent house for my parents because that's just kind of what . . . it's a goal that I've had for a while" (Interview 1). Diego moved beyond simply discussing financial movement when he said, "I wanna be able to let [my brother] know that if he ever needs a favor, not just financially, but in any sense, I have the resources to be able to help him out" (Interview 1). In essence, participants maintained strong family bonds and expressed goals to contribute financially to their families after completing their college degrees.

Both first-generation and non-first-generation participants expressed the aspiration to provide social movement for their future families rather than their current families. For example, Ana shared, "If it's in my life story to have kids and have a family, like how can I give them what my parents had given me, you know, like my parents had given me everything" (Interview 1). Ana also wanted to provide more for her future family than her parents had provided for her. This concept was supported by Pablo: "The leading factor to coming to a higher institution is to basically have a better life than I had growing up for my children" (Interview 1). Claire stated, "I wanna be able to provide for my future family (Interview 1), and Olivia said, "I would like to provide for a family if I ever do have a family" (Interview 1). Isabella stated that she could not "go backwards, like I have to keep moving forward and not have [the Latino/a financial stereotype] for my children and their children" (Interview 2). Isabella's perspective is interesting, as she grew up in a wealthy family. Whether participants came from low or high socioeconomic backgrounds and regardless of their status as first-generation or

non-first-generation college students, there was a shared hope to move their future families forward economically.

Community. Participants mentioned the goal of contributing to the social movement of their communities. Diego remarked that education reflects on society and that people should attend college to improve themselves and society: “Education is the key . . . it reflects back on society. It’s being an engaged citizen, I would say” (Interview 1). Consistent with this concept, Karina shared that she “decided I was gonna go to college—not only because I owed it to my parents. . . . I felt like I owed it to myself and to my community as well” (Interview 1). Karina felt that she was serving as a role model for others in the Latino/a community. During high school, she was involved in an organization in which she mentored youth.

I just noticed that, I don’t know, some kids that were like me, that I saw myself in them, that were Latino/Latina. Some of them were struggling, some of them were not, and I just felt like I owed it to them so they could see that someone like them could actually go on to do more stuff. (Karina, Interview 1)

Both Michelle and Sean discussed their desire to obtain college degrees then move back home in order to give back to their local communities. Michelle said, “As I started coming [to college], and now that I’m realizing like okay, I’m helping my family, I’m helping myself, and now I wanna go back and help others down [at home]” (Interview 1). Sean stated,

Well, I saw like where I lived, and I was like most of these people probably never left So I’m like I might as well get a college education so I can go

somewhere better and actually do some stuff and maybe in a couple years come back and try to implement some new changes, like fix it somehow. (Interview 1)

Providing social movement for self, family, and community was an emerging subtheme within the participants' motivators for attending college. Regardless of first-generation status or socioeconomic status, participants expressed pressure to move their families and communities forward, in addition to a desire for personal financial achievement. This pressure will be noteworthy when describing the lived experience of being undecided about an academic major for Latino/a college students.

Career preparation. Participants commonly discussed attending college as a means for career preparation. Michelle differentiated between preparing for a *career* and preparing for a *job*. "A job is just something part-time, help pay bills ... and then a career is like, for me, what I studied hard for, what I you know am gonna do for the rest of my life with my degree" (Interview 1). Michelle stated that she was "getting a degree and being able to actually get a career, not just a job, a career actually and making better money so I can help [my family] out more" (Interview 1). Likewise, Pablo stated that his motivation for attending college was to prepare for a career: "Higher education is a stepping stone to a better life, I would say, than what you had. . . . it's the stepping stone to possibly a professional career" (Interview 1). Both Michelle and Pablo viewed attending college as a gateway to a career, which is related to the subtheme of social movement due to a career's potential impact on financial status.

Isabella also viewed higher education from the perspective of career preparation. She said, "College is for bettering yourself so that you can do the best that you possibly

can in your career” (Interview 1). Diego shared Isabella’s notion of self-improvement as a means for career preparation: “It makes sense in every single way to go to college and find something that you love, and you know, just go into it seriously and love what you do, and just keep developing into it” (Interview 1). Alex contended that a college degree was the only way to pursue a career. “There’s no career path that would not involve a college degree” (Interview 1). Santana described attending college as academic preparation for a future career. “People need to go through [college] so that they not only get the experience socially, but also academically so that they can prepare for whatever is ahead of them in their respected fields” (Interview 1).

Similarly, Ana, Olivia, and Sean discussed college as a means for finding a job. Ana claimed that college would “obviously open up opportunities for jobs, so I know that’s why I’m here” (Ana, Interview 1). Sean added that a college education leads to opportunities for high-paying jobs, which overlaps with the subtheme of social movement. “Most jobs that pay well, it’s like, oh, you need a college education unless you wanna work minimum wage” (Sean, Interview 2). Olivia discussed the need to apply what she learns to a job someday: “I wanna know what [college students] know because they can use what they’ve learned and go to a job and do what their passion is” (Interview 1). Overall, participants espoused the idea that they were motivated to attend college because it would enhance their ability to enter a career in the future.

Education is an opportunity. Participants Claire, Diego, and Olivia expressed that attending college was an opportunity that not everyone has the privilege to pursue. For instance, Claire remarked,

I knew that being in America, like I had the resources to go to college. My mom didn't have those opportunities. . . . But I knew that I had to take advantage of all of these opportunities—not even take advantage of it—like just do it because my family on that side just doesn't have these opportunities in Mexico. (Interview 1)

Although Claire was not a first-generation college student, her mother's side of the family had not had the opportunity or means to attend institutions of higher education. In a similar way, Diego had witnessed inequalities when he grew up in Mexico. As a result, he felt motivated to attend college because others in his family could not do so. He shared that he wanted to “take advantage—not take advantage in an uneven way or something—just take advantage of the opportunities that are offered in this country that, as I've grown up in Mexico . . . I've seen the different levels of inequality” (Interview 1). Olivia described attending college as a blessing. “I just know that school, I know it's very important . . . because it's a big opportunity that I've definitely been blessed with having” (Interview 1).

Challenging gender stereotypes. Female participants presented an additional subtheme. Ana, Karina, and Michelle each spoke about challenging gender stereotypes by attending college.

Where I'm from . . . it's just the idea there was like, you know, have babies, be a housewife, support your husband, you know, just cook, clean around the house, like that's all you're gonna do. And I wanna show, you know, definitely females down there like hey, there's so much more to life than just being that. (Michelle, Interview 1)

Michelle wished to attend college and set an example for other women to show them that higher education is possible. In a similar way, Karina wanted to pursue higher education and battle gender stereotypes. She stated, “I wanna do something with myself that isn’t like what people . . . I guess not expect, but you know, the stereotypical ‘She’s gonna get pregnant like really young’ or ‘She’s gonna get addicted to drugs’ or something” (Interview 1).

Ana described similar gender stereotypes to the ones expressed by Michelle. Ana said, “So in my household, and I would like to say in my family, you know, a woman’s job, you know, be at home, wife, cooking, cleaning, provide for her family, you know, like just be kinda like a mom” (Interview 1). Ana continued by saying that her ultimate goal was still to be a mother and wife but that she aspired to serve in those roles after she had completed her degree and started a career. Ana’s aunt had served as her inspiration because she had completed a doctoral degree before starting her personal life. Several female participants mentioned the role that gender stereotypes have played in their decisions to attend college, which can add a layer of complexity to the experience of being Latina and undecided regarding an academic major.

Selection of Original Major

All participants discussed factors that had influenced the selection of their original academic majors when entering college: family pressure, financial stability, employability, and lack of exploration. The findings indicate that the participants were mostly focused on fulfilling family expectations, earning a future income, and increasing the probability of securing a job when selecting their majors, rather than considering

their professional interests or skill sets. Understanding the participants' motivations for selecting an original major provides key insights when exploring their experiences of being Latino/a and undecided about a major.

Family pressure. The majority of participants stated that they had received pressure from their parents and family members to pursue specific academic majors.

I selected my original major because of the expectations my family and friends had for me to become a successful doctor. . . . I decided biology would be the best choice for me in order to reach the goal that was imposed onto me. (Pablo, Questionnaire, Q1)

Pablo's said that pursuing a medical-related major had not been his idea. Instead, he spoke about his family actively pressuring him toward a major in biology. "It was more pressure from my family, because they expected a lot from me, and they were like . . . 'He's gonna be a doctor'" (Interview 2). Pablo stated that his parents' expectations imprinted on him as they pushed him toward medicine. Before he even began his college experience, his mother "brag[ged], so she'd say to my aunts and uncles and my cousins like 'Yeah, [Pablo] is gonna be an anesthesiologist or a neurologist.' I mean, like you're around that so much that . . . it's like imprinted in your mind" (Interview 1).

Similarly, Ana was considering an academic major in education when she applied for college. However, her mother actively pushed her in a different direction. "Because I'm a Latina, because I speak Spanish, because I have such high grades, [my mom] wants more from me. And I guess she knows I have so much more of a potential than being a teacher" (Interview 1). Moreover, Ana's mother rejected her second choice

for an academic major. “So I always wanted to do actually bioenvironmental science, but mom told me it’s not a real major, can’t really do much with it, so I gotta think realistically” (Interview 2).

In a similar fashion, Isabella said, “I was really into marine biology because that’s something I’m extremely passionate about. But any time I brought it up to my dad, it was more of ‘What are you gonna do with that? There’s no money in that. No’” (Interview 1). Isabella also shared that both of her parents “had a really big influence on what major I guess I picked, more so my dad than my mom” (Interview 1).

Michelle and Alex had comparable experiences to those shared by Pablo, Ana, and Isabella. Michelle had initially wanted to major in dance but

Whenever I discussed it with my mom, she told me . . . “You’re gonna go study, not for stupid stuff like, you know, you can’t go study dance, like you’re not gonna make money or get a career doing dance.” (Michelle, Interview 2)

Alex felt passively pressured by his family to pursue an engineering degree. “I remember bringing up different career choices to my mom, and she would not put as much attention to it as engineering or those good career choices, quote/unquote” (Interview 1). Later, Alex stated, “It was like I never really considered other majors since . . . I kinda wanted to, how can I say it, please my mother by going in a route that she would be proud of” (Interview 2).

Sean did not talk about pressure from his parents. Instead, he spoke about his brother’s influence in the major selection process. He said that he had “selected my original major because my brother suggested it for me” (Questionnaire, Q1). He stated in

the interview, “My brother was like ‘Hey, you should be an engineer, I feel like that’s what you should do.’ . . . I’m like okay, so I applied as an engineer” (Interview 2).

Santana reinforced the experiences of other participants:

My parents expected me to become like something important, like objectively important, like a chemical engineer or a bio engineer or an engineer, period, or a doctor, you know, something where the practical use of that degree would help everything, it was something big like that. (Interview 2)

Santana shared a story detailing his experience of telling family members that he had selected journalism as his original academic major. “So [uncle] was like, ‘So, what are you gonna be doing, what are you finally gonna be doing?’ I’m doing journalism, and like the look on his face was kinda like, it looked destroyed” (Interview 2). Ultimately, both first-generation and non-first-generation participants experienced active and passive family pressure to pursue specific fields of study.

A subset of participants expressed that they had not received family guidance when selecting their original academic majors. Several first-generation participants were pressured toward or away from certain majors but their family members had not guided them through the major selection process.

Because me being a first-generation college student, no one really has been to college in my family . . . Since no one really went to college, I can’t really talk to anyone about what major I should choose. . . [Parents] really don’t have that much of a higher education, so I really can’t make any decisions based off what they tell me because they don’t know what to say. (Sean, Interview 2)

Likewise, Michelle commented, “Since I was the first generation, I couldn’t go to my parents or anybody in my family to talk about . . . deciding on what major I wanna be, because they didn’t know any better than what I knew” (Interview 2). Diego said, “Since [my family] didn’t have too much education, then I couldn’t really turn to them as to say ‘Hey, what do you think would be the most appropriate major for me?’” (Interview 2). Essentially, first-generation college students received pressure from family members during the major selection process, although their families could not provide much guidance during the process.

Financial stability. In addition to family pressure, participants cited the need for money or financial stability as a primary influence when selecting their original majors. The desire to pursue a major based on financial gain was not unique to first-generation students. Instead, the majority of participants expressed that money was a motivator. For example, Alex “had the belief that getting an engineering degree would bring job security and financial stability in my life” (Questionnaire, Q1). Alex also said, “Having an engineering degree meant I guess a safe zone, by having an engineering degree, I wouldn’t have to worry about money or things like that” (Interview 1). Alex admitted that he “would just Google highest paying jobs, highest paying bachelor’s, and I came across petroleum engineering” (Interview 1). As a result, he had selected petroleum engineering as his original major in college.

Michelle had also selected her original major based on the potential for a high income: “Money. Yeah, so that’s always what I look into whenever I’m trying to decide for a degree, just to make sure you know I’ll be financially stable later on with my

career” (Interview 2). Michelle continued, “Whenever I’m looking into a major, the biggest thing that drives me, and even if it’s bad to say, like I admit it, it’s money, at the end of the day it’s always been money for me” (Interview 2). Likewise, Isabella shared, “[Father] made me think that the money should mean something to me” (Interview 2); Karina said, “I ended up choosing environmental studies because I knew that I had more chance of making more money if I went into this major than if I went into teaching” (Interview 2). Karina opted to pursue a science major because “I could make more money in that field of work than my second major options” (Questionnaire, Q1).

Both Diego and Pablo spoke about the allure of future earning power. Pablo said, “I was like I’m gonna pick the medical specialization that just gives you the most money” (Interview 1). Diego said, “The fact that it pays well . . . I know the pay is really well, engineers get paid really well” (Interview 2). It is noteworthy that financial reasons influenced both participants’ desires to attend college, as well as their selection of original academic majors.

Employability. Along with financial stability, participants had selected their original majors based on the major’s likelihood to lead to post-graduation employment. Alex exemplified the focus on employability when he said, “Not having to worry about what to do after I graduate. That was another thing, employability, like finding a job afterwards” (Interview 2). Alex wanted to select a major that would lead directly to a career after graduation. In a similar way, Diego maintained, “I had an understanding that engineers, once they’re done with their bachelor’s degree, they can get the job fast and they don’t have to worry” (Interview 2). Diego expected that an engineering degree

would lead to a secure job. He said, “The fact that it’s a job that you can have job security, especially today when that may not be, you know, that cannot be said for all the majors out there” (Interview 2). Overall, Diego “believed [a degree in engineering] could present me with good job opportunities after graduation” (Questionnaire, Q1).

Isabella and Santana had also selected majors based on employability. In fact, Isabella fluctuated between two separate majors when entering college and considered both of them due to employability. She said, “I knew that a degree in economics would offer me an array of options for careers” (Questionnaire, Q1) and “I knew that if I studied [biomedical sciences], I would have had a lot of career paths that I could’ve chosen from” (Interview 2). Similarly, Santana “realized that [journalism] was actually an industry, I saw that it was a big industry at that too, I saw that there was a chance at it (Interview 2).

Others had selected their majors based on employability in a specific profession or career field. For example, Ana said,

I applied with mathematics because I could do something with it. And I didn’t really like math, so I changed it to bio because you know I was thinking alright, you’re right, mom, education, being a teacher won’t get me anywhere, so let me go into pre-med. (Interview 1)

In Ana’s opinion, selecting mathematics or becoming pre-med would lead to more job opportunities than would a major in education.

Claire had opted to major in meteorology because she specifically wanted to be a meteorologist. “I started looking up what does it take to be a meteorologist, what does it

require . . . this is perfect, like I'm so good at science, and I'm so good at math, this is exactly what I wanna do" (Interview 2). However, Claire ultimately changed her mind regarding her career path.

Olivia had selected her original major due to its ability to lead directly into her future goal of medical school. "I did look into public health, and I thought it was really interesting because I was really set on going to medical school with that kind of degree" (Interview 2).

In summary, participants had selected their original majors based on the perceived employability of the major, as well as its ability to lead directly to post-graduation goals.

Lack of exploration. Several participants lamented that they had selected their original academic major without exploring their options. Michelle stated, "I did not think it through at all" (Interview 2). She continued, "I wish I would've done more research myself, but I was just like where do I began, how do I start this, you know, like, so that's why I chose psychology" (Interview 2). Still, Pablo recalled that he "never really had the opportunity to like explore career choices" (Interview 1) when he was selecting his original academic major. Sean shared that he was so focused on simply attending college that the selection of his major was essentially an afterthought. He said,

I was going in blind eye, even though I was valedictorian of my high school, no one ever asked, "Oh, what's your major or what do you think you should do?"

No one ever said, "Oh, your skills are in this." It was more like "Just go to college, that's the number one goal." (Sean, Interview 2)

Santana spoke about selecting his academic major flippantly. In his words, he selected journalism “primarily out of a whim as it was my backup to my backup to my backup, which isn’t something that I’m proud of to acknowledge” (Questionnaire, Q1).

Instead of exploring major options, both Claire and Sean talked about the role of the media in their major decision-making process. Claire said, “I saw the movie *Twister* . . . and I thought that was the absolute coolest thing in the world because they would just chase those tornados” (Interview 2). As a result, she wanted to pursue meteorology as her major. In a similar fashion, Sean said, “I tend to watch a lot of YouTube videos . . . and like *Mythbusters* as well, that’s a popular TV show . . . and I was always amazed about all the stuff they can build and all the science behind that” (Interview 2). Thus, he decided to pursue electrical engineering. In both cases, the participant had selected an academic major while possessing minimal information about the actual major.

Isabella, Sean, and Pablo admitted that they had not had adequate knowledge of major and career options when they had initially selected their majors. Isabella stated, “It was so hard and intimidating knowing that there were hundreds of majors to choose from” (Interview 2). Sean said, “I really didn’t know what kinda majors were out there. . . . I wasn’t shown different jobs, I wasn’t shown different majors, I wasn’t shown like the variety of things” (Interview 2). Pablo chose to major in biology in order to pursue medical school, yet he “never did any research or familiarize myself with the process to go to medical school” (Interview 1).

First-generation participants also spoke about their high school experiences as the basis for selecting a major. Instead of exploring the specific academic majors in

college, they tended to gravitate toward the subject matter to which they had been exposed in their secondary education experiences. For instance, Alex mentioned, “In my high school I was in engineering-based classes, so it just felt natural to keep with engineering” (Questionnaire, Q1). Olivia stated, “I had been in a medical program kinda thing in high school, and I enjoyed it, so I just thought because I have this background, then public health and like medical school is like the thing for me” (Interview 2). Karina maintained that she “took my AP environmental science class in my junior year [of high school]. And so I guess basically I based [the decision] off of that” (Interview 2). Karina’s situation was interesting because she also discussed her lack of interest or ability in science, although she had selected a science-intensive major due to her high school experience. Diego said, “I selected my original academic major due to encouragement of various high school teachers” (Questionnaire, Q1). Diego had had a statistics teacher who recognized Diego’s skillset in mathematics and had encouraged him to pursue engineering.

Reasons for Indecision

All of the participants in this study identified as being Latino/a and as experiencing indecision regarding their academic majors; furthermore, they were all changing from their original majors. Findings indicate that the participants’ reasons for indecision included changing priorities, racial and ethnic issues, lack of self-awareness, no passion for the original major, and academic ill preparedness. These reasons for indecision speak to the participants’ lived experiences of being Latino/a and undecided about a major.

Changing priorities. The participants discussed financial stability as one of their priorities in selecting their original academic majors. However, when they talked about their desire to change academic majors, they consistently reflected a shift away from viewing money as a priority. Diego demonstrated the subtheme of changing priorities:

Now what I've realized and what I didn't know before actually coming to college is that what also counts is not just the money that you're gonna make after you graduate, but whether you feel that you're doing something that you like and that matters to you. . . . It's just that there's new priorities or new factors that you know have influenced my decision in terms of like what it is that I wanna major in. (Interview 2)

Diego continued by stating that money and job security had “taken like a little second-row seat to what it is that I like to do, what it is where I feel comfortable, and where I feel fulfilled and those kinds of things” (Interview 2). Diego's priorities had shifted away from money and toward personal fulfillment, which led to his desire to change his academic major.

Olivia, Karina, and Ana resonated with Diego's new perspective. Olivia said, “I don't wanna be blinded about making my goal just to make a lot of money” (Interview 2). Karina said, “I realized it is more important to love what you are doing with your time and life instead of doing something just for the money” (Questionnaire, Q2). Ana said, “I only wanted to go to medical school because you know they make a lot of money” (Interview 2). In essence, Ana did not select her original major based on her

interest or skillset in the medical field, resulting in her indecision regarding her major. Instead, she contended that “money can’t buy you so much happiness” (Interview 2).

Alex and Isabella demonstrated similar shifts in their priorities related to financial stability; however, these participants added a layer of complexity. Alex and Isabella placed more emphasis on their personal opinions than on the opinions of family members, which challenged the subtheme of family pressure. For instance, Alex stated, “I felt as if I was doing [engineering] for somebody else” (Questionnaire, Q2). He added, “Whenever I got to college, it was kinda like that shift of, you know, it’s really important for you to find out what you really like in order for you to follow through” (Interview 2). Still, Alex also spoke about the importance of not letting money be one’s priority when selecting an academic major: “For people who are Latino and I guess need money shift towards that. And I’ve learned that if you shift towards something just for the money, you know, it’s really easy for you to give up” (Interview 2).

In a similar way, Isabella described how her priorities had changed from focusing on money and family pressure. “The reason I’m changing majors is because my experiences in college have taught me that no one’s opinion matters as much as mine does” (Questionnaire, Q2). Isabella also said, “I’m in college and realizing that it’s my decision, and not someone else’s” (Interview 2). She drew a distinction between her thought process and that of her father regarding the selection of an academic major. Isabella grew up in a wealthy family but her father grew up with less financial privilege.

I think it’s hard because people expect Hispanics to like be these hardworking people that like are trying to get themselves out of a situation. But that’s not

where I'm at. . . . I get to make these decisions because I'm passionate about what I love, and I don't have to make the decision to do something for the money the way [father] had to. (Isabella, Interview 2)

Her father wanted Isabella to select a major that would allow her to earn a sizeable income, and she let his opinion influence her initial decision. Nonetheless, she was experiencing indecision because "earning a high salary will never fulfill my desire to help others" (Questionnaire, Q2). Isabella wanted to break the stereotype that Latino/a college students always come from low-income families. "I want to break those assumptions, break the stereotype, and not be that person that is trying to pursue something for the money" (Interview 2).

Alex summed the notion of changing priorities when he said that he needed to "forget about what I used to think or kind of rewire my brain to be open-minded about just every other aspect of what this university has academically speaking" (Interview 2).

Participants in this study had selected their original academic majors due to family pressure, financial stability, employability, and lack of exploration; however, they experienced indecision regarding their academic majors once their priorities began to change in college. They became undecided when they began to place more emphasis on personal and professional fulfillment, which prompted them to question the selection of their original academic majors.

Racial and ethnic issues. Participants experienced culture shock when they began to attend college. It is important to note that the participants self-identified as Latino/a and were selected from a PWI of higher education in Texas. Nevertheless,

Michelle shared, “Yeah, so I mean back home, I’m surrounded by Latinas, you know, Latinos. So when I came here, it was definitely a big cultural shock for me” (Interview 2). Likewise, Karina expressed, “So coming here [to college], it was a really big culture shock . . . mostly my classes are mostly White people. . . . Not seeing people that looked like me was kind of off-putting” (Interview 2). Santana stated, “Like coming here for me was culture shock. . . . When I came here, I saw my first legit Black person . . . and like half the population here is White, so that was also a big shock to physically see” (Interview 1).

Isabella and Sean maintained that they were not considered to be Latino/a in their home towns. Instead, they were viewed as being more White than Latino/a. Isabella said, “It’s kinda funny that I’m categorized as Hispanic now [in college], because before I was more of a White Hispanic, because if you had money [in the home town], you were seen as White, even though you weren’t” (Interview 2).

It’s either I’m too White for Hispanic culture, or I’m not White enough for like the culture that we’re in right now which is predominantly White. . . . I’m scared to embrace [his culture] because of the racism that I might or might not face here. (Sean, Interview 2)

Both Isabella and Sean said that their racial and ethnic identities were a point of emphasis in college, which aligned with other participants’ reports of culture shock. In essence, participants agreed that were viewed differently from other students.

Alex maintained that being Latino made it difficult for him to connect with other college students. “So I think if you’re Latino and have a really Latino name, it’s kind of

hard for someone who is not Latino, for example Caucasian, to really have that connection with you” (Interview 2). He continued, “It kinda sucks only because you’re Latino . . . it’s difficult for you to get involved because there’s that barrier, I guess, between you and your colleagues” (Interview 2). Alex said that White students looked at him differently, which made him feel like an outsider. “Whenever you’re trying to interact with specifically Caucasian people, it’s pretty, yeah, it’s just right off the bat you kinda feel like off, you don’t feel incorporated” (Interview 2). For many participants, the feeling of being an outsider influenced their experience of being undecided about their academic majors.

Ana had already begun to explore major options in preparation for changing academic majors but she remained undecided. She could not realistically consider certain majors because she believed that Latinos/as were not welcomed into those majors.

The only thing that really has me kind of also staying away from bioenvironmental science is the people that are in that class. I look at the demographics my first couple days of classes. I am the only dark-skinned person in that entire class, everybody else is White, blond hair, blue eyes. . . . So I feel like my skin color is like a burden sometimes. Like I know it should be something like I’m proud of, don’t get me wrong, I’m definitely proud of who I am, where I come from. But I feel like just sometimes it’s a burden to be a minority, like I should embrace it, but sometimes I feel like it would be easier

here at [college], especially in a STEM major, to be White, and then I wouldn't have such a hard time in a lot of my things. (Ana, Interview 2)

Ana's experience as an undecided Latino/a college student was marred by the notion that her racial/ethnic identity was a burden. She concluded that did not have access to certain academic fields of study; therefore, she felt limited in her ability to explore major options.

Michelle also experienced racial and ethnic barriers to academic majors. Specifically, she was interested in learning more about business-related majors but was treated like an outsider.

When I looked into, you know, getting into business programs, . . . I was like I can't get into these opportunities, I won't have these opportunities, because you know I'm a Latina. Seeing the way how the other, you know, majority of people here treated me, it was like I was useless, you know, I didn't matter, and you know I just wasn't, I don't know how to put it into words, but like I wasn't up to their standards. (Michelle, Interview 2)

Michelle's experience was similar to Ana's experience in that her Latino/a identity affected her ability to explore certain major options. Michelle expressed feelings of intimidation when she was taking business classes: "I was the only Latina there, so I was definitely so intimidated" (Interview 2). Michelle experienced moments of racism in her classes.

As soon as I would speak, you know, I have my accent, sometimes it comes out, and you know people would look at me. . . . And then of course when I would

talk, there was always somebody that had to correct me, always, like it always happened. I couldn't just speak my ideas without somebody, you know, looking at me weirdly or being like, "Oh, you pronounced that wrong, it's pronounced this way." . . . Who cares if I'm a female, who cares if I'm a Latina, right, who cares about my accent? Like if they did it, I can do it, too. (Michelle, Interview 2)

Michelle was determined to not let her racial and ethnic identity serve as a determining factor as she explored majors. However, she ultimately believed that certain majors were difficult to consider because, "as a minority, as a Latina, you know . . . it's just like will people accept me, like will I get into these programs, it just felt like I wouldn't have the same opportunities" (Interview 2).

Claire expressed similar concerns when exploring science-related options.

My background and like myself as like a Hispanic woman. I feel like, I don't know, in the sciences, like you just you're expected to be like . . . I don't know how to describe it, like you're expected to be White, and you're expected to just be smart and know like what you're doing. (Interview 2)

Claire also stated, "I feel like in America, like these White Americans like think that they're the only people who can accomplish the sciences, but I think that everybody, people of color as well, can do this too" (Interview 2). Claire maintained that she needed to embrace her identity and not let it negatively impact her options for an academic major. "I just need to embrace who I am and just really hone in on what I wanna do, and then really go and accomplish that" (Interview 2).

Other participants also talked about the need to embrace their racial and ethnic identities. For instance, Michelle said, “I’m not just gonna magically become you know a different race or something, right? So I’m like I need to just you know accept who I am, embrace it, and you know just go out there” (Interview 2). Isabella said, “I embrace the fact that I am Hispanic, and I do have those qualities, even though I didn’t see them before, I guess you could say” (Interview 2). Michelle described the experience of being Latino/a and undecided about an academic major as a “short time of suffering for a long time of peace. . . . I can’t let me being a Latina get in the way of what I wanna do” (Interview 2).

Lack of self-awareness. Study participants discussed their lack of self-awareness as a factor that contributed to their indecision regarding academic majors. In short, participants did not know their interests, skills, or future desires. This lack of self-awareness was prevalent among both first-generation and non-first-generation participants. Pablo provided an example of how his lack of self-awareness was not directly tied to his status as a first-generation college student.

If you’re a first-generation college student, getting through college is like walking through a dark room with objects everywhere. So basically like you’re bumping into things, like these are like obstacles in your way to graduating . . . [by being undecided] now it’s like walking through the dark room with your eyes closed. You add another layer of blindness basically. . . . It’s kind of concerning because, like I said, a lot of Latino or Latinas are first-generation college students, that doesn’t mean that they don’t know what they wanna do, you know?

They obviously have passion and drive and they know a lot of them, you know?

Then there's me. . . . Maybe I'm doing something wrong or whatever, like there's underlying doubts sometimes. (Pablo, Interview 2)

Pablo's metaphor of walking through a dark room with his eyes closed gets to the heart of what it means to lack self-awareness. He did not know his passions and drives, which added a layer of uncertainty and doubt to the difficulty that he was experiencing as a first-generation college student. Pablo also expressed frustration because people had recommended that he select a major based upon his interests, yet he did not know his interests. "It's kinda frustrating when you talk to people because the first thing they always ask you is 'what do you like to do?' . . . I felt like it was condescending because I don't know what I like to do" (Interview 2). Ultimately, Pablo "never had the period of 'discovery' in order to figure out what I really enjoyed doing and what I would also enjoy studying" (Questionnaire, Q3).

Alex had an experience similar to Pablo's. Alex said, "I don't really know myself, I don't know what I like, and I don't know if what I like is because I like it or because other people that I respect or like it as well" (Interview 2). Alex also stated, "I also lack self-awareness of who I am and what I want for myself since everything I have done has been for my parents so I can make them proud" (Questionnaire, Q3). Alex had selected his original major based on his parents' wishes. As a result, he was unaware of his academic and professional interests, which became a challenge when he was changing academic majors.

Similarly, Sean recalled, “I didn’t know what I would like to do and I didn’t know what my skills could be applied to, which specific major” (Interview 2). Michelle lamented, “Man, so many headaches just trying to figure out what I wanted to do” (Interview 2). Santana shared that he was struggling to identify a major or career path that he would enjoy but lacked self-awareness. “I don’t even know what I am . . . You wanna be doing something you love, but when I think about that, I don’t really know what I love doing” (Interview 2). Claire was concerned about lack of self-awareness.

I’m just like I have no idea what I wanna study, I don’t know what I’m really doing, I feel like I’m going through all of these classes like aimlessly trying to decide what I wanna do in college and after college. . . . I was so concerned because I feel like I don’t have a plan anymore, and I don’t know what I’m doing, and I’m kinda just like going through life like not knowing what I wanna do. (Claire, Interview 2)

Claire was directionless and did not possess the self-awareness necessary to make a decision regarding her academic major.

Claire and Isabella discussed possessing too many interests. For instance, Claire said, “They’re like ‘why don’t you like know what you wanna do?’ and it’s because I love everything science, I don’t know which science I wanna study yet” (Interview 2). Isabella said, “I like everything, I can’t tell you what I like or dislike because everything just interests me, and I’m passionate about everything, and it’s just so difficult trying to figure out which one I like the most” (Interview 2). Claire and Isabella could not narrow their choices because they lacked self-awareness, which contributed to their indecision

regarding academic majors. Isabella shared, “I’ve struggled with deciding what would be best for me: what would give me the most career options, what would interest me, what would I do well in” (Questionnaire, Q3).

Pablo, Santana, and Claire also experienced identity confusion due to a lack of self-awareness. In essence, they entered college believing that their interests and skill sets were in specific areas; however, they realized that their self-concepts were not accurate. For instance, Santana said, “I kind of left high school kind of thinking that I knew who and what I was. But I think after my first semester here, going back home for a month, I kinda realized that I didn’t” (Interview 1). Likewise, Pablo shared,

I felt like I was the man in high school, you know? And then I get to university, like everything that basically like that I thought defined me. . . . Like, everything that you thought you could do best, someone is better at it in every single aspect. (Interview 2)

Pablo’s self-concept was challenged once he realized that he was not skilled in his original academic major. However, he was unaware of his skill set and lacked the self-awareness necessary to select a new academic major.

Claire said,

I just was so torn about what I wanted to do because my entire life, I wanted to study meteorology and wanted to report the weather. And then I don’t know, all of a sudden . . . I changed my mind, and I was kind of upset about it, but like at the same time I wasn’t sure what I wanted to do with my life. (Interview 2)

The participants had experienced shifts in their self-concepts. Their indecision regarding majors was fueled by a lack of awareness regarding interests, skill sets, and future desires.

No passion for original major. Study participants sought to change their majors due to their lack of passion for the original majors that they had selected. For example, Diego believed that he possessed the skill set to remain an engineering major but he was not passionate about the field. “I can certainly do it; it’s just that I decided to switch out of it because it simply wasn’t something that was like my passion compared to other things that I might find more driving and interesting” (Interview 2). Diego was critically examining his career interests and had decided that engineering no longer aligned with his passions. “I no longer felt satisfied with the material I was learning in my courses” (Questionnaire, Q2).

Isabella shared, “Other people were so passionate about their majors compared to me” (Questionnaire, Q2). Olivia said, “I just wasn’t really excited for public health. . . . I realized that I don’t know if I really want to pursue public health, just because, I mean, like I didn’t have like a big passion for it” (Interview 2). Michelle stated, “Psychology is not for me. . . . I was like why am I gonna go through four years of college, you know, that isn’t easy, and then end up with, you know, a career that I’m not passionate about” (Interview 2). Santana said, “I realized I didn’t like [journalism], and it took me a while to realize that. I thought I was gonna push myself through it, but I really didn’t like it” (Interview 2).

Participants did not love their original majors, which led to the desire to change majors. This concept is interesting, as they also expressed a lack of self-awareness, including the inability to identify their interests and passions. Essentially, they could not identify their interests; however, they knew that they were no longer interested in their original majors.

Karina was changing her major because she was no longer interested in her original selection. “After two semesters of environmental studies, I found that I did not enjoy it as much as I thought I was going to” (Questionnaire, Q2). Ana shared, “Thinking about being a bio major just doesn’t make me happy. . . . I’m so unhappy, I’m so unhappy with bio” (Interview 2). Sean said, “I was unhappy with my original major. I thought I would enjoy it; however, I was wrong. . . . I was miserable in it and my grades reflected it” (Questionnaire, Q2). Sean had a difficult time attending engineering classes due to his disdain for the course material. Likewise, Pablo admitted, “I just wasn’t enjoying going to class. . . . I would find it difficult sometimes just to get up and motivate myself to go to these classes” (Interview 1).

Multiple participants used strong language such as *hate* when describing their original major selection. For instance, Sean said, “I hate engineering” (Interview 1). Santana said, “I hate the direction I decided to chase. It’s not fun” (Questionnaire, Q2). “I am changing my major because I hate the major I have now” (Ana, Questionnaire, Q2). Overall, participants were unhappy and unpassionate about their original academic majors, which contributed to their experiences as undecided Latino/a college students. Pablo summed this notion: “Simply put, the benefit of being in biology for another four

plus semesters did not outweigh the benefit of switching out and attempting to find something that I would enjoy more” (Questionnaire, Q2).

Academic ill preparedness. In addition to lacking passion for their original major choices, participants spoke about being academically ill prepared. Lack of academic preparedness caused several participants to question their major selection and affected their ability to select new majors. For instance, while Alex enjoyed his major in engineering, he felt that his engineering courses were moving too quickly and he could not maintain the pace. “I still like engineering, but yeah, I just couldn’t keep up with the coursework, so I decided to shift” (Interview 2). He also said, “I guess I realized I wasn’t as . . . I don’t wanna say smart enough to be in engineering, but just by taking physics and calculus too, it was just very, very difficult for me” (Interview 2). Alex was discouraged by difficulty with the course material. “People were understanding it, and I just felt like throughout the whole course, I just felt dumb, like behind, you know. Because everybody got it, and I didn’t, and I had really like a really hard time understanding it” (Interview 2). As a result, Alex’s GPA suffered, which made it difficult for him to explore other academic major options.

Similar to Alex, Sean experienced academic difficulty in his engineering courses. Although he had been the valedictorian of his high school, Sean “did really bad in the classes because coming to college, I didn’t know how to like study properly” (Interview 2). Sean’s grades were negatively affected and his GPA became a barrier to exploring majors. “Grades, that’s a big one, because since I didn’t do that well my first semester, I’m in general studies right now, so I have to work my GPA back up” (Interview 2).

Likewise, Ana expressed, “I need to bring up my GPA, and my GPA is pretty low” (Interview 2). She stated, “I don’t think I was academically prepared at all” (Interview 2). Karina also stated that her GPA was a challenge when attempting to decide on a new academic major: “My GPA definitely is one [challenge]” (Interview 2).

Pablo and Karina maintained that their high school experiences had not prepared them for the academic rigors of their original majors.

The high school that I went to wasn’t the best academically . . . so getting into university, you’d be sitting in class, and people are like talking about certain concepts that you’ve never heard of. . . . You feel overwhelmed by not only what you are about to learn, but what others have already learned. You feel like you’re put at a disadvantage. . . . It’s really discouraging when you know that other people know the material because they had a better education than you, and you’re doing extra work in order to catch up and then some to actually get what the professor is talking about. So I mean you just weren’t prepared at all. (Pablo, Interview 2)

Similarly, Karina reported that in high school she had not been exposed to specific mathematics and science courses that would have better prepared her to major in environmental studies. “The math and the science Well, I didn’t take calculus in high school. I was really bad at physics So it just frustrates me having to do it when I don’t really care much about it” (Interview 2).

Olivia had intentionally avoided specific academic majors because she did not feel academically prepared to consider them. She said, “I know that there are some

[majors] that I definitely shy away from just because I feel like they were just too difficult for me” (Interview 2).

Ultimately, academic ill preparedness negatively affected participants’ experiences in their original majors, prompting them to change majors. Yet, due to poor grades, several participants were experiencing difficulty in examining new major options.

Impact of Being Undecided

When describing the experience of being Latino/a and undecided regarding an academic major, participants used words such as *alone*, *lost*, *anxious*, *stressed*, *depressed*, *frustrated*, *ashamed*, *afraid*, *selfish*, and *pressured*. Findings indicated seven subthemes within the theme impact of being undecided: feeling lost and alone, worried about future, shame and selfishness, pressure to be a role model, stressed for time, fear of selecting the wrong major, and coping strategies. The impacts of being undecided illuminate the participants’ lived experiences of being Latino/a and undecided about academic majors.

Feeling lost and alone. Both first-generation and non-first-generation participants experienced feeling lost and alone. Michelle shared, “Well, I felt lost, that’s like if I had to put it in one word, lost. I had no idea what to do, and I didn’t know how to begin research” (Interview 2). Diego said, “I honestly feel completely lost. I don’t know what I’m doing, I just know that what I’m doing right now is not something that I like” (Interview 2). Sean commented, “All of a sudden I get to college, no one tells me what to do, I make decisions on my own, it’s more like I’m lost because I don’t know

what to do” (Interview 2). In each case, the participant was disoriented due to indecision, wanting to change academic majors but lacking the knowledge and support to do so.

Participants also felt isolated, as if they were the only college students who were experiencing doubts regarding their academic majors. Santana stated, “Most of my friends know what they’re doing, there’s only probably one other one who doesn’t, but even then she already has somewhat of an idea, and the thing is, I don’t, so it felt off. . . . I mean, I felt like the only one who was as indecisive” (Interview 2). Isabella reported, “I was so indecisive, and it was really intimidating because I knew so many people that knew exactly what they wanted to, and I was just completely clueless” (Interview 1). Diego shared, “Often, when somebody is going through a hard time or something, it feels like you’re the only one that’s been in that position, you’re the only one that can’t decide what it is that you wanna do” (Interview 2).

First-generation participants specifically added a layer of complexity because they also felt that they had been forced to make academic decisions on their own. They lacked family assistance, which led them to feel alone and lost in making indecisions. For example, Diego said,

Not having anyone I could directly speak to who could help me change my major . . . I feel that I’ve had to do that kinda by myself—not in a bad way, like I mean I don’t reproach my parents or anything like that. I don’t have like any bad feelings against, so I understand that it’s just that I’ve had to look for that kind of help elsewhere. (Interview 2)

Diego continued by stating that first-generation Latino/a students lack support when they are undecided, which contributes to their feelings of isolation.

Not having that lawyer dad and doctor mom, or nurse mom and engineering dad or that kinda thing, it doesn't provide me with like much security as much as maybe, you know, White students would have. . . . It's not necessarily a big disadvantage, it's just as Latino and not having so much like backing and safety net. (Diego, Interview 2)

Similar to Diego, Michelle said that she had been required to make decisions regarding her new academic major without family assistance. She had actually started exploring campus resources that were designed to assist with her indecision, which prompted her to say,

People need to know that [resources] are available here on campus. Like they need to know these things because if not, they're gonna go through what I went through, and they're gonna feel alone, they're gonna feel like they have to figure out all these things by themselves. And it just puts so much pressure and stress on them. (Michelle, Interview 2)

As an undecided Latina student, Michelle felt that she was forced to figure out her future by herself.

Worried about future. In addition to feeling lost and alone, participants were worried about their futures. Alex said, "What I'm experiencing right now is really bad uncertainty and anxiety of the future" (Interview 2). He also said,

Very disappointing to myself, very anxious. Not having a decision is very, very . . . it's just gives you this anxious feeling of not knowing, you know, what the future holds, or where I'm gonna be once I graduate, or even if I graduate at all.
(Interview 2)

Feelings of anxiety and disappointment were common among participants. They were worried about the possibility of not graduating from college, as well as their potential for future career options.

Sean stated, "If I don't get my grades up, I could probably be like kicked out of this university, or I could not be accepted to my major, so that's stressful" (Interview 2). Claire discussed her frustration related to being undecided and worried about the possibility of graduating from college.

If I'm not able to decide, I feel like I'm not gonna be able to go forward because I'm gonna be so frustrated with myself. And not that I would ever drop out, but I would definitely be extremely discouraged about like moving forward and trying to graduate college. I would feel like I would just be really frustrated.
(Interview 2)

Santana spoke about his fear of an unknown future. Since he was undecided, he felt that he did not have control over his future. "I really don't know what to do. . . . I really don't know what I'm gonna be doing. . . . I'm worried about the future that I can't control . . . fear of the unknown" (Interview 2).

Other participants discussed their worry about the future in terms of feeling depressed. For example, Karina said that being undecided made her feel “stressed, anxious, kinda depressed” (Interview 2). In a similar way, Ana said,

It’s definitely been an emotional roller coaster. Like I felt everything from like super-depressed. . . . I don’t know if I’m upset because I don’t get it, or if I’m upset at myself because I couldn’t get it, or if I’m sad because like I don’t have it yet. (Interview 2)

Ana explained her worry and depression as being rooted in her indecision about an academic major. She was sad because she could not perform well in her original major; furthermore, she was sad because she had not identified a new academic major.

Shame and selfishness. Participants regularly discussed family expectations and self-expectations that they had faced when entering college and pursuing their original academic majors. Earlier, these expectations were examined as being contributing factors for the themes of *motivators for attending college* and *selection of original major*. However, by being undecided, the participants felt that they were not meeting expectations, which led to feelings of shame and embarrassment.

Alex commented that he had not lived up to his self-expectations. “It’s very sad to have, you know, this high expectation of yourself, and then just realizing that it wasn’t what you wanted or it isn’t what you were capable of” (Interview 2). Alex was ashamed because he was not academically capable of continuing in his original major; furthermore, he no longer wished to pursue engineering, even though his parents were proud of his engineering major. Alex also shared that his confidence was lowered during

this original major and that he hoped to remove himself from that experience. “So, it kind of hit my confidence a little bit, my self-esteem a lot, so it was kind of something that I didn’t wanna experience any more” (Interview 2).

Pablo and Ana likewise talked about not meeting personal expectations. Pablo said, “Right now, it’s just literally I understand that there’s a change being made, but I don’t have that same sense of accomplishment” (Interview 1).

When you come to university, you’re like man, I’m gonna get all of this done.

You’re like I’m gonna like start working out, I’m gonna get a job, and I’m gonna get A’s in school. And then in the middle of the semester, it all starts falling apart. (Pablo, Interview 1)

Pablo initially had expectations of majoring in biology in order to pursue medical school. Yet, he was not performing well in his classes. By being an undecided student, Pablo felt that he was no longer accomplished, which made him feel ashamed.

Ana described her embarrassment: “I’m not gonna lie, it’s a shot to my pride (Interview 2). She also mentioned that she felt that she was no longer making her parents proud. “I just want to make something of myself, and I wanna be happy, but I also wanna make my parents happy” (Interview 2). She continued,

I just don’t wanna let [family] down, you know, like I have a below 2.0 GPA, you know, like I’m not even meeting the bare minimum anymore. . . . I just wanna make [mother] proud, but I just feel like I’m not making her proud right now being not an engineering major, being not a pre-med major. (Interview 2)

Feeling ashamed due to not meeting family expectations was shared by several participants. Isabella had not told her family about her decision to change majors: “I’ve struggled with telling my family about my decision, as it surprises them” (Questionnaire, Q3). She was fearful of her father’s opinion regarding her decision to leave economics. She commented that changing majors and career paths is scary due to “having to face like my dad’s opinions about the direction that I’m going in and like what he’s gonna have to say about it” (Interview 2).

Karina said, “I guess I was just like really afraid of what my parents were gonna say” (Interview 2). Karina was ashamed that she was leaving environmental studies because she did not want to appear to be surrendering. “I was afraid that everyone else was gonna be like ‘well, she couldn’t go through with it’” (Interview 2). “I didn’t want to seem like I couldn’t do what I said I was going to do. . . . I didn’t want my family and friends to think I was dumb or that I give up easily” (Questionnaire, Q3).

Pablo and Sean also talked about their shame arising from not meeting family expectations. Pablo said, “I take my classes so seriously because I don’t want to be like a failure to my mom, or even my aunt, who’s like my second mom” (Interview 1). Pablo also shared that family expectations followed him even though he had decided to change majors away from biology. “I ended up switching, and my mom, she was okay with it . . . but I feel like she has these expectations again” (Interview 2).

Everyone like all my family are like “Oh, we’re proud of you,” but it’s like that itself, it’s like okay, well I guess I have to live up to this expectation. . . . It’s more like as putting pressure in myself where I’m like, “Oh, they have this

expectation because they're proud of me, so I gotta keep doing this." And that's also stressful because like what if I don't wanna do [it]? (Sean, Interview 2)

Sean felt that he was not living up to his family's expectations, which caused him to feel stressed and embarrassed.

Olivia said that she was ashamed and selfish for not taking advantage of her educational opportunity.

I feel really blessed that I did receive like a great gift just because like my cousins, they're not really pursuing like higher education, or they just don't have the money to do it. . . . In this moment, at this time, I feel like I'm not, I don't know, I guess in a way I don't feel like I'm grabbing the opportunity, if that makes sense. (Interview 2)

Olivia also shared that her cousins would likely know their major and career plans, which made her feel selfish.

For me to be undecided, I also feel like I'm taking advantage, in a way, just because I feel that if my cousins were here, and if they had the opportunity to come here, they would know exactly what they wanna do. . . . I mean, it makes me feel just a little selfish. (Interview 2)

Olivia had decided that she was taking the place of other college students who were not accepted into her institution of higher education. "I just feel like I'm being selfish just because there's so many students that I'm pretty sure I knocked out getting here, and I don't even know what I wanna do" (Interview 2).

In summary, participants reported that they were not living up to family expectations and self-expectations. This “failure” led many of them to express feelings of shame and selfishness.

Pressure to be a role model. Female participants talked about feeling pressure to serve as role models; however, their indecision regarding academic majors had led them to conclude that they were not succeeding as role models. For instance, Claire said, “I feel like my little brother and sister are watching me, everybody around me is watching me” (Interview 1) and Olivia said, “I hope to be kind of like a light for my brother that school is definitely necessary, and he really like needs to go kinda thing” (Interview 2). Isabella said, “I think it has a lot to do about representing I guess the Latina population” (Interview 2). Isabella commented that people viewed her academic and career decisions differently because she was Latina. She described the pressure:

It was just really hard because, as a Hispanic, I want to show that we’re successful and want to show that just because, you know, I have a Spanish last name or I’ve come from a Mexican background doesn’t mean that I can’t be successful. (Isabella, Interview 2)

Karina commented, “So, I mean, I guess you could say we’re like setting the example for all of the other little kids that aren’t there yet” (Interview 2). Karina wanted to serve as a role model for children so they would aspire to attend college.

Ana summarized the pressure of being a role model as she described her initial journey toward engineering, as well as her current status of undecided. “I just wanted to

break barriers, you know, Hispanic, you know, a Latina in a White man's job, I guess you could say, or career field" (Interview 2). She added,

I'm not gonna lie, like some of the petroleum engineering sounded really good because of the money. . . . At first, it was like money incentive, and then it was more like a status kinda thing, like oh yeah, you know, like I'm a Latina, and I'm gonna study petroleum engineering, like I'm just as good as all the other White guys in that engineering class [By being undecided,] I felt shunned, you know, like I'm not out to break barriers anymore, I'm not living up to expectations. (Ana, Interview 2)

Ana wanted to set an example as a Latina in a traditionally male-dominated, stereotypically White industry. However, she had decided that she was no longer a good role model because she was undecided and wanted to change majors.

Stressed for time. The majority of the participants reported that they felt stressed for time. In other words, they needed to select a new major as quickly as possible because they were potentially pushing back their graduation dates. They concluded that, by being undecided, they were wasting time and money. This notion was shared by both first-generation and non-first-generation participants. For example, Pablo said,

So coming to university, like I have one shot, you know, to basically like get my degree and get like my life going to basically better myself from what I had growing up, you know. . . . But switching majors, like this is my second shot, like this is like my second shot and my last shot, you know, like in order to get what I want. (Interview 2)

Pablo was a first-generation student and did not come from a wealthy family. He stated, “There’s people that I talk to, and they’re more wealthy off or whatever, like that’s good for them. . . . But you just start to think like they’re switching majors, like they’re not worried about staying an extra year” (Interview 2). Since he could not afford to stay in college for more than 4 years, Pablo felt pressured to make the decision regarding his new major quickly. “I don’t like to make decisions based off of emotion. I like to think things through rationally. But there was definitely emotion involved in that switch because there’s such a short time” (Interview 2).

Michelle was also a first-generation participant. In a similar way to Pablo, she said, “Since I don’t have money, and you know, my scholarships are for 4 years, so I feel pressured in a sense that I need to get all my life together in four years” (Interview 1). She also said,

It was just so much pressure and man, so many headaches that I would go through, and I would just freak out because I was like okay, no, I’m on a clock here, you know, the time is ticking. . . . I’m running out of time. (Interview 2)

Likewise Isabella, a non-first-generation participant who came from a wealthy family, said that she was fearful of wasting time and money, which caused her to feel pressured to make a decision regarding her major. “Selecting a new major, I think it was just really struggling with the fact that I might have to stay an extra year, and that was scary” (Interview 2). Isabella also said, “My first year might be like an absolute waste, and I just would’ve been here for like absolutely no reason, and that’s just like a really, really scary thought . . . both time and money that like feels wasted” (Interview 2).

Similarly, Alex felt pressured to find “what major would be the fastest for me to graduate in” (Interview 2). He was concerned because “I also cannot afford to stay in college for more than 4 years” (Questionnaire, Q3).

Claire said, “I need to make decision as soon as possible” (Interview 2). Claire spoke specifically about feeling stressed for time: “I’m just like so worried about it because I feel like I’m pressed for time” (Interview 2).

Olivia was also concerned about wasting time and money: “It’s just a lot of time and money that would be wasted if I keep changing it” (Interview 2).

Diego added context regarding why he felt pressured to select a new major quickly. “You can feel really desperate when you wanna get out of something” (Interview 2). Diego was distressed because he wanted to leave engineering but did not know what new major to select. He experienced similar time-sensitive, financial issues due to his indecision. “Since my parents are also not paying for college, I get to do this through scholarships and financial aid, then I also wanna decide quickly before I have some kind of trouble with that as well” (Interview 2). However, Diego continued by explaining how his Latino identity had contributed to his feelings of time pressure.

But being Latino is specifically, it makes it just a little bit more delicate to be in that kinda situation [undecided], because maybe we don’t have all the resources that we would like to have, or compared to other people who do have a lot more. . . . I can’t lack off and just say okay, well something is gonna come up, you know, later. I have to be, you know, just constantly looking for what it is that I wanna do. (Interview 2)

Diego wished to identify a major as quickly as possible: “I want to decide, you know, quickly but not rush” (Interview 2).

Conversely, instead of expressing concerns related to wasted time and money, Santana commented that he felt pressure to select his new major quickly because he would not have time to change it again in the future. Santana had completed 60 credit hours of college courses while he was a high school student. Therefore, as a freshman in college, he no longer had access to certain majors because he had amassed too many credit hours to transfer into them.

I’m worried about okay, so if I go into this field, am I gonna like it at the end?

And if I don’t like it, then how much time do I have left to change it again? And I don’t really have the time to be constantly changing it because again, I came in with like 60 hours. (Santana, Interview 2)

Fear of selecting the wrong major. In addition to feeling pressured for time, participants displayed a fear of selecting the *wrong* major. Sean shared his definitions of a *wrong* major and a *correct* major. “The main issue is the fear of if I’m choosing the wrong major, a major that might not get me a job or I might not be interested in after all” (Questionnaire, Q3). On the other hand, he contended that a correct major “has to be the person’s interest, and at least to me has to be able to get a job with. And also you’re not miserable in the major, which again can lead back to the interest in the major” (Interview 2). In other words, Sean was afraid that he would select a new major that was not interesting after all and that would not lead to career opportunities, which might cause him to continue in a cycle of indecision.

I don't know if I'm interested in this [major]. I don't know if, I think I'm interested, but it could be engineering all over again. . . . [Being undecided] makes me feel like I don't know what I'm doing, and that kinda scares me . . . I feel like whatever decision I make will be wrong. (Interview 2)

Similar to Sean, Alex defined a correct major: "A good major is something I'm happy with, but socially speaking . . . a good major is something that's respectful, you know, socially, and something that pays good, is what I would say is a respectful major" (Interview 2). However, Alex was afraid that, if he selected the wrong major, he would be trapped in a major and career that he did not enjoy.

Claire and Diego felt the same way.

If I don't pick the major that I wanna be a part of, like, correctly, I don't wanna make myself upset and then, I don't wanna have a bad job and not enjoy my life. . . . I need to pick something correctly so that I do the job that I was meant to be a part of. (Claire, Interview 2)

"Eventually, we all wanna be able to graduate and have a good job and have that kinda security, and from there, just live a happy life, that kinda thing. But it all starts with like just making the right choice" (Diego, Interview 2).

Similar to Sean, Olivia and Pablo expressed concern that they might repeat the cycle of indecision by changing majors more than one time. They feared that, if they selected the wrong major, they might not enjoy it more than the original major choice. Olivia summarized her dilemma:

That I'll make the wrong choice. I think that's one of my bigger fears, because I don't want to go into a major and then change it sophomore year and then change it again junior year. . . . I really do just wanna choose a major that I really enjoy, but like I can also, I don't know, like I want to apply my skills and use them in like the world in some way, so yeah. (Interview 2)

Pablo said, "When I'm feeling happy that I'm not in [biology], at the same time I'm also thinking to myself, 'Did I make a mistake?'" (Interview 1). Pablo was second guessing his decision to leave biology because he was afraid that he would select a new major incorrectly.

I'm hoping that I enjoy [the new major], you know, because that's ultimately why I switched, I wanted to enjoy what I was doing. But there's no way to know yet, you know, and that's the scary part of where I'm at right now. Like there's no way to know that if I'm gonna like it, if the decision that I made was actually worth it, you know? (Pablo, Interview 2)

Overall, participants were committed to leaving their current academic majors but were undecided about their new majors. When considering new majors, they were afraid that they would select the wrong majors. They feared that, if they selected the wrong majors, they would face added distress, as well as the potential of changing majors again in the future.

Coping strategies. Three participants revealed coping strategies that alleviate the negative impact of being undecided: being involved in Latino/a student organizations, identifying Latino/a mentors, and identifying other Latinos/as who were also

experiencing indecision regarding academic majors. For example, Ana and Karina were involved in separate student organizations where they interacted with other Latinos/as at their college (a PWI).

But definitely joining a [Latino/a] organization helped me a lot in my first transition here at [college]. I've done a lot of firsts with them, and they've definitely made me kind of not be so I guess ashamed of who I am and where I come from. (Ana, Interview 2)

Karina found inspiration to confront her indecision by attending a conference in which she interacted with successful Latino/a professionals. "I went to [a conference] on Latino affairs, and I really enjoyed it because I had never seen so many Latinos professionally, like I had never seen that, so it just really inspired me" (Interview 2).

Pablo described a mentoring relationship with the advisor of his Latino student organization. He had spoken to his mentor about being undecided regarding his academic major; his mentor recommended several support services and resources offered by the college. Pablo credited his mentor as a primary source of support as he struggled with indecision.

[The mentor] is like the biggest resource that I have here. . . . He's the leader of the organization that I'm in, or he's the director, and he works with Latino students, you know? And basically like I talk to so many people within the organization and other organizations that he manages. And then they say the same thing, they're like "without [him], I have no idea where I'd be," you know? So without that help, I just don't know where I'd be, you know? (Interview 2)

Michelle mentioned that her boyfriend was Latino and struggled with indecision regarding his major and career. She served as a support system for him and vice versa.

I don't know how people do it, the ones that come here alone, because man, if I wouldn't have my boyfriend with me, I don't know how I would survive. . . . I don't know how I would've made it through without somebody being there to, you know, to like you know talk to me like you know listen to me and experiencing the same things that I was, and always just being like it's okay, like this is part of life, we wanted to come up here, you know, we knew this stuff was gonna happen. (Michelle, Interview 2)

Michelle had experienced blatant racism when she was exploring business-related major options. Ultimately, she concluded that it was helpful to know a peer who related to her experience of being an undecided Latino/a college student.

Chapter Summary

This chapter described the lived experiences of 11 persons who identified as Latino/a college students, who were changing their academic majors, and who were undecided about what new academic major to select. Findings revealed four superordinate themes: motivators for attending college, selection of original major, reasons for indecision, and impact of being undecided. Each superordinate theme included four to seven subthemes. In general, these participants had originally opted to attend college to meet family expectations; provide social movement for themselves, their families, and their communities; prepare for careers; take advantage of educational opportunities; and challenge stereotypes. They had selected their original academic

majors based on family pressure, the desire for financial stability, and potential future employability; they admitted to only limited exploration of their original majors.

That being said, all participants were changing from majors and were undecided about what new major to select. They experienced indecision due to changing priorities, racial and ethnic issues, lack of self-awareness, lack of passion for their original majors, and academic ill preparedness. As a result, these undecided students felt lost and alone, worried about the future, experienced shame and selfishness, felt pressure to be role models, were stressed about time, and feared selecting the wrong major. They identified coping strategies that had reduced some negative impacts of being undecided.

CHAPTER V

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents a discussion of the findings reported in Chapter IV. It includes a summary of the study and examination of the findings in relation to the relevant literature and theory cited in Chapter II. The chapter ends with recommendations for HRD practice and future HRD research.

Summary of the Study

The purpose of this study was to explore the experience of being undecided about academic majors for Latino/a college students who were changing their academic majors. One research question guided this study: *What is the lived experience of being undecided about an academic major for Latino/a college students at an institution of higher education?*

The study was delimited to the state of Texas. Texas is heavily populated by Latinos/as, who constitute 39% of the state population (Pew Research Center, 2016b). Texas ranks second in the United States for total Latino/a population. Furthermore, 87% of the Latinos/as in Texas identify as being of Mexican origin (Pew Research Center, 2016b). Approximately 50% of all Latino/a college students are the first in their family to attend college (i.e., first-generation college students; Santiago, 2011). Participants attended a public, 4-year PWI of higher education in Texas; no other geographic areas were considered in this study.

Phenomenology was selected as the methodology for the study based on the purpose of the study and the research question. Data were collected data through two

separate rounds of interviews with 11 participants. In addition to these interviews, each participant responded to an open-ended questionnaire after the second interview. Study participants were chosen based on criterion-based, purposive sampling (Patton, 2002). Ultimately, data consisted of results of 22 separate interviews, yielding 390 pages of transcripts, and 11 sets of responses to the open-ended questionnaire.

Eleven undergraduate Latino/a students participated in the study; four identified as sophomores and seven identified as freshmen. Six identified as female and five identified as male. All 11 participants identified as Latino/a and of Mexican origin. Seven of the 11 participants identified as first-generation college students or students whose parents had not attended an institution of higher education (Hottinger & Rose, 2006). All 11 participants were changing their academic majors after having originally selected majors from a variety of academic disciplines. IPA was used for data analysis, which consisted of six steps: (a) reading and re-reading, (b) initial noting, (c) developing emergent themes, (d) searching for connections across emergent themes, (e) moving to the next case, and (f) looking for patterns across cases (Smith et al., 2009). The life-span, life-space theory (Super, 1957), SCCT (Lent et al., 1994), and vectors theory (Chickering & Reisser, 1993) were used to frame the study.

Four superordinate themes emerged from the data: (a) motivators for attending college, (b) selection of original major, (c) reasons for indecision, and (d) impact of being undecided. Each superordinate theme included four to seven subthemes. Participants decided to attend college due to family influences and the desire to socially advance themselves, their families, and their communities. They recognized that others

in the Latino/a community may not have had the opportunity to pursue higher education and so they wanted to take advantage of the educational journey to prepare for future careers. Female participants also wanted to challenge traditional gender stereotypes.

The participants had selected their original academic majors based on family expectations, financial stability, and employability. They reported that they had not explored options thoroughly when they selected their initial majors. Instead, they had focused on academic majors that would afford them the largest monetary return on investment (ROI). Noe (2010) defined ROI as the economic value of a training outcome. In this case, participants were investing time and money to pursue higher education and they sought to identify academic majors that would result in sizeable future incomes, as well as increased prospects of employability. Their majors were selected to align with family expectations and pressures. In essence, participants pursued majors that would yield a large ROI, without taking into consideration their personal areas of interest or skill. Diego summed this concept: “Before, I didn’t consider liking what I did such a big driving factor in choosing [a major]. And now it certainly is” (Interview 2).

Participants were experiencing indecision regarding their majors due to (a) changing priorities, (b) racial and ethnic issues, (c), lack of self-awareness, (d) no passion for the original major, and (e) academic ill preparedness. However, they began to place more emphasis on their interests, passions, and skills rather than on monetary gain and job stability. Unfortunately, they lacked awareness of their own interests and were experiencing academic difficulty. Several were limited in exploring new majors

due to racial and ethnic issues, such as feelings of discrimination that prevented them from pursuing specific majors.

Being undecided caused participants to feel lost, alone, worried, ashamed, selfish, pressured, anxious, depressed, fearful, or stressed. They continued to feel pressure to select new academic majors that led to financial stability but also wished to pursue their own interests. All participants mentioned that, in being undecided about an academic major, they were not meeting personal and family expectations. Ana epitomized this notion: “I just wanted to break barriers, you know, Hispanic, you know, a Latina in a White man’s job, I guess you could say, or career field” (Interview 2).

I’m not gonna lie, like some of the petroleum engineering sounded really good because of the money. . . . At first, it was money incentive, and then it was more a status kinda thing, like oh yeah, you know, I’m a Latina, and I’m gonna study petroleum engineering, I’m just as good as all the other White guys in that engineering class . . . [by being undecided] I felt shunned, you know, like I’m not out to break barriers anymore, I’m not living up to expectations. (Ana, Interview 2)

Discussion

Seven conclusions were drawn from examination of the experience of being undecided about academic majors for Latino/a college students: (a) Exploration is key, (b) family influence is prominent, (c) racial and ethnic identity intersects CD, (d) balancing expectations and personal desires is difficult, (e) balancing financial need and personal desires is difficult, (f) first-generation students face added complexity, and (g)

Latina students face added complexity. Each conclusion is discussed below as it relates to HRD literature and theory, using representative quotes from the data to underscore each conclusion.

Exploration is Key

Every participant in this study appeared to be engaging in tasks associated with the exploration stage of Super's (1957) life-span, life-space theory. They were investigating their interests and abilities, examining educational preferences, and attempting to clarify occupational inclinations. These findings are consistent with Bullington and Arbona's (2001) study of Mexican American adolescents, which similarly found that participants were aligned with the exploration stage of Super's theory. However, the undecided students in the current study were recycling back into the task of crystallization, where they were developing new vocational goals (Super, 1990).

By being undecided, participants were moving from their original career preferences and restarting the exploration process. Statements by Sean and Pablo represent this concept. "I really didn't know what kinda majors were out there, and I didn't know what I would like to do, and I didn't know what my skills could be applied to, which specific major" (Sean, Interview 2). "I never really had the opportunity to explore career choices" (Pablo, Interview 14). Pablo also said, "I never had the period of 'discovery' in order to figure out what I really enjoyed doing and what I would also enjoy studying" (Questionnaire, Q3).

Participants expressed feelings that aligned with Gordon's (1992) exploration process model, which promotes the exploration of self (self-knowledge), academic majors (educational knowledge), career options (occupational knowledge), and the decision-making process (decision-making knowledge). It is important to note that Gordon's model draws extensively from the exploration stage of Super's theory (Steele & McDonald, 2000).

Self-knowledge. Self-knowledge involves assessing one's abilities, values, interests, and personality (Steele & McDonald, 2000). Multiple participants conveyed that they lacked self-awareness, which limited their ability to make major and career-related decisions. This finding is consistent with a study by Milsom and Coughlin (2015) that found that undecided major-changers often lacked self-awareness. For example, Alex said, "I also lack self-awareness of who I am and what I want for myself since everything I have done has been for my parents" (Questionnaire, Q3). Isabella said, "I can't tell you what I like or dislike because everything just interests me" (Interview 2). Santana shared, "You wanna be doing something you love, but when I think about it, I don't really know what I love doing" (Interview 2). Overall, participants lacked self-knowledge and were starting the journey of self-exploration. These findings are consistent with literature regarding career decision making by Latino/a college students. For example, Corkin et al. (2008) noted that Latino/a college students lacked knowledge of how their personal interests and skills related to careers.

Several participants also reported that their self-images were shifting. For instance, Santana said, "I kind of left high school kind of thinking that I knew who and

what I was. But I think after my first semester here, going back home for a month, I kinda realized that I didn't" (Interview 1). Santana's statement is representative of the identity confusion that was experienced by the participants. According to Chickering and Reisser (1993), two of the primary developmental tasks for college students are establishing one's identity (Vector 5) and developing one's purpose (Vector 6). In alignment with Chickering and Reisser's (1993) vectors theory, the participants were challenging their original notions about academic majors and careers, as well as questioning their career identities. Essentially, their concepts of identity and purpose were changing due to major indecision.

Educational knowledge. Educational knowledge involves understanding the system of academic majors at a college or university (Steele & McDonald, 2000). Multiple participants maintained that they did not possess a solid understanding of the educational offerings at their institution. For instance, Isabella said, "It was so hard and intimidating knowing that there were hundreds of majors to choose from" (Interview 2); Sean said, "I wasn't shown different majors, I wasn't shown like the variety of things" (Interview 2). Michelle expressed regret about not having researched major options prior to selecting her major: "I wish I would've done more research myself, but I was just like where do I begin, how do I start this" (Interview 2). Research suggests that major-changers typically have limited exposure to academic majors (Milsom & Coughlin, 2015). During the major-changing process, the participants in this study lacked educational knowledge when attempting to identify new academic majors.

Occupational knowledge. Occupational knowledge refers to a student's ability to connect an academic major to the world of work (Steele & McDonald, 2000). Several researchers have suggested that Latino/a college students consider only a narrow range of occupations due to limited exposure to options, as well as due to cultural norms (Fouad, 1995; Gordon, 2006; Gross, 2004). Undecided college students typically do not possess a solid understanding of the requirements for career paths (Gordon & Steele, 2015). Consistent with the literature, participants in this study lacked occupational knowledge. For instance, Pablo admitted, "I wanted to be a doctor, but I never did any research or familiarize myself with the process to go to medical school" (Interview 1). Pablo had selected a major in biology based on family pressures to attend medical school; although he was focused on the idea of becoming a doctor, he did not understand the roles, responsibilities, or process of pursuing a career in the medical field.

Decision-making knowledge. Decision-making knowledge addresses the influences that are extant in making major and career decisions (Steele & McDonald, 2000). In this study, the motivators that influenced participants' selections of their original majors were consistent with the literature. Findings indicated that the participants selected their original majors based on family pressure, financial stability, and employability; they attended college to increase social mobility for self, family, and community and to prepare for careers. In agreement, studies have shown that parent and family pressures (Corkin et al., 2008; Fisher & Padmawidjaja, 1999), future earnings (Risco & Duffy, 2010), and cultural norms and expectations (Gross, 2004) play a large role in the Latino/a career decision-making process.

Participants were experiencing indecision regarding their academic majors because their priorities were changing. In other words, their motivations for selecting majors and careers were no longer the same as when they had selected their original majors. For example, the need for financial stability was replaced by an emphasis on personal interests: “I realized it is more important to love what you are doing with your time and life instead of doing something just for the money” (Karina, Questionnaire, Q2). Still, some participants continued to express concern about family expectations and pressures. Regarding being undecided, Karina said, “I was just like really afraid of what my parents were gonna say” (Interview 2).

In essence, these participants wanted to explore their personal interests and make decisions based on their personal interests instead of on money and family pressure. They were beginning to take control of the decision-making process, even though they still experienced conflict related to cultural norms such as *familismo* (a strong affiliation with the nuclear or extended family), *simpatia* (the need to make relationships pleasant and smooth), and *allocentrism* (individual goals that are subordinate to group goals; Fouad, 1995). As a result, participants felt ashamed and selfish because they were changing majors despite family needs and expectations. Ana illustrated this concept: “She [mother] threw such a tantrum because I was throwing my life away [by changing majors], I had such good opportunities to go into petroleum engineering” (Interview 2). She continued, “I just wanna make her [mother] proud, but I just feel like I’m not making her proud right now being not an engineering major, being not a pre-med major” (Interview 2). Ana was changing her major because she hated her original major

selection, even though it was preferred by her family. The prominence of family expectations is discussed further in the next section.

In summary, these participants lacked self-knowledge, educational knowledge, and occupational knowledge that is necessary to make informed decisions. Moreover, their decision-making processes were shifting as they began to explore their personal interests and abilities. They were engaging in developmental tasks associated with the exploration stage of Super's (1957) life-span, life-space theory, especially as it relates to the crystallization substage.

Family Influence is Prominent

For many Latino/a students, going to college is about achieving their family's goals rather than simply about the student (Gamboa & Vasquez, 2006). Findings from this study are consistent with this notion. Diego captured this concept: "In terms of all Latinos being connected to their family, at least the people that I know, I mean we all have like a really deep connection with our families" (Interview 2). These participants had originally attended college due to family influences and to provide social movement for their current and future family members. Family pressure influenced the participants' selection of their original majors. Since then, participants had experienced shame and worry because, by being undecided, they were no longer living up to family expectations.

Alex's experience epitomized the role that family played in the participants' experiences of being undecided. "I never really questioned about going to college, it was kind of like the absolute next step I had to do . . . Basically, I was expressing what my

mom thought, that not going to college was just a mistake” (Interview 1). Next he said, “The reason why I’m attending college, is I do not wanna have financial problems in the future. I don’t wanna basically go through what any of my family went through, you know” (Interview 1). Alex had selected engineering as his major because his family wanted him to be an engineer. “I remember bringing up different career choices to my mom, and she would not put as much attention to it as engineering” (Interview 1). In fact, Alex had not considered any major other than engineering. “It was like I never really considered other majors since . . . I kinda wanted to, how can I say it, please my mother by going in a route that she would be proud of” (Interview 2).

Alex admitted that he was changing his major even though he “felt as if I was doing it for somebody else” (Questionnaire, Q2). Yet, Alex experienced difficulty identifying new major options because he lacked self-awareness of his own interests and abilities. He was no longer living up to his own expectations. “It’s very sad to have, you know, this high expectation of yourself, and then just realizing that it wasn’t what you wanted or it isn’t what you were capable of” (Interview 2). Overall, several participants talked about how family expectations were prominent throughout their experiences and expressed concern related to disappointing their families.

In Chickering and Reisser’s (1993) vectors theory, the third vector requires one to move through autonomy toward interdependence. In other words, college students must function independently and free themselves from the need for constant reassurance and approval from outside entities, such as family (Chickering & Reisser, 1993). However, the participants in this study experienced difficulty in separating from family

expectations. Their inability to fulfill family obligations contributed to their feelings of shame and guilt. They were apparently having difficulty in navigating Chickering and Reisser's (1993) third vector. This conclusion is consistent with a study by Corkin et al. (2008) that found that parental pressures among Latino/a college students made self-exploration and major-exploration difficult. Simply put, exploring career interests and gathering information about majors was not sufficient due to family expectations to pursue specific fields (Corkin et al., 2008).

Research also indicates that undecided students are likely to have a low sense of career self-efficacy (Arbona, 1995; Bullock-Yowell et al., 2014; Niles et al., 1997). Undecided Latino/a students may not be confident in their capacity to make decisions about academic majors. Participants in this study exhibited low self-efficacy. For example, Sean shared, "I feel like whatever decision I make will be wrong" (Interview 2). Claire said, "If I'm not able to decide, I feel like I'm not gonna be able to go forward because I'm gonna be so frustrated with myself" (Interview 2). Olivia said that she was afraid of making the wrong choice related to her new major: "That I'll make the wrong choice. I think that's one of my bigger fears, because I don't want to go into a major and then change it sophomore year and then change it again junior year" (Interview 2).

In alignment with SCCT, participants struggled to develop personal goals for their new majors and careers. What is more, their outcome expectations (i.e., their expectations from selecting their original majors) were being challenged due to disinterest in their original major, academic ill preparedness, or racial and ethnic barriers. The participants related concern about the future, stress for time, and fear of

selecting the wrong major due to low self-efficacy and inaccurate outcome expectations, all of which influenced their personal goals.

These findings are consistent with the literature. Research shows that the decision regarding an academic major and career is often viewed as a family decision, rather than an individual decision, among Latino/a college students (Gamboa & Vasquez, 2006). This low self-efficacy in the participants may be tied to their dependence on family expectations and desires.

Studies have shown the potential for Latino/a students to experience barriers to educational success while simultaneously striving to correct family struggles, improve finances, and fulfill family and cultural obligations (Clark et al., 2013; Corkin et al., 2008; Fouad, 1995; Risco & Duffy, 2010). Participants in this study wished to fulfill family expectations, provide social movement for their families and communities, challenge stereotypes, and ensure future employability. As a result, they felt pressured to select a new major quickly and correctly, while also dealing with feelings of doubt, shame, and guilt because they wished to change majors.

On the other hand, it is important to note that Isabella and Diego specifically spoke about how the decision regarding a major and career belonged to them and that they were self-assured in their ability to select a new major. Isabella said, “I’m in college and realizing that it’s my decision, and not someone else’s” (Interview 2). Diego said, “I know that through my abilities, I can get you know the job I want, I can get the major I want” (Interview 2). The confidence expressed by Isabella and Diego speaks to their heightened sense of career self-efficacy or confidence in their capacity to choose a new

major and career, which distinguished these two participants from others in the study. Nonetheless, Isabella struggled with telling her family about her decision to change majors, whereas Diego wanted to select a new major that would still allow him to give back to his family. Therefore, these participants exhibited higher self-efficacy but still demonstrated the need to incorporate their families into the decision-making process.

Racial and Ethnic Identity Intersects Career Development

Gross (2004) found an intersection between CD and cultural identity development in racial and ethnic minority students. Specifically, Gross reported that Latino/a college students faced challenges such as stereotype and prejudice when developing their career identities. Findings from the current study align with the study by Gross. As undecided Latino/a college students, these participants experienced culture shock, racism, and gender bias when attempting to choose new academic majors. Ana's experience was representative.

The only thing that really has me kind of also staying away from bioenvironmental science is the people that are in that class. I look at the demographics my first couple days of classes. I am the only dark-skinned person in that entire class, everybody else is White, blond hair, blue eyes. . . . So I feel like my skin color is like a burden sometimes. Like I know it should be something like I'm proud of, don't get me wrong, I'm definitely proud of who I am, where I come from. But I feel like just sometimes it's a burden to be a minority, like I should embrace it, but sometimes I feel like it would be easier

here at [college], especially in a STEM major, to be White, and then I wouldn't have such a hard time in a lot of my things. (Ana, Interview 2)

Ana was attempting to identify academic majors that interested her while she changed from a major that her family preferred. Yet, she felt that her cultural identity prevented her from exploring specific majors.

Likewise, Alex remarked that he was viewed differently by being Latino. "It kinda sucks only because you're Latino . . . there's that barrier, I guess, between you and your colleagues" (Interview 2).

Michelle said that she felt excluded from certain majors due to her racial and ethnic identity.

When I looked into, you know, getting into business programs . . . I was like, I can't get into these opportunities, I won't have these opportunities, because you know I'm a Latina. Seeing the way how the other, you know, majority of people here treated me, it was like I was useless, you know, I didn't matter, and you know I just wasn't, I don't know how to put it into words, but like I wasn't up to their standards. (Interview 2)

Overall, participants experienced racial and ethnic barriers to academic majors. In addition to racial and ethnic barriers, Fouad (1995) found that Latinos/as experience cultural norms that influence the decision to enter higher education, as well as the major decision-making process. As discussed above, *familismo* (strong affiliation with one's family) and *allocentrism* (individual goals subordinate to group goals) are Latino/a cultural values that appear in the literature (Fouad, 1995). In alignment with these

values, participants in the current study experienced difficulty when they decided to switch academic majors. They initially felt compelled to follow the wishes of their families and select majors that would provide social mobility for the group as a whole. However, these decisions were made at the detriment of their own goals and desires. As their priorities began to change, the participants had decided to change academic majors, leading to negative emotions such as guilt, shame, and selfishness. In essence, they struggled to make decisions that allowed them to pursue new majors while still preserving cultural norms.

In SCCT, people are more likely to participate in a task or behavior if they believe that they will succeed, regardless of barriers that they might encounter (Lent et al., 1994). In this study, racial and ethnic issues, as well as cultural norms, presented barriers for participants as they explored major options. As a result, the participants expressed feeling lost, alone, and worried about the future. They had already experienced negative outcomes due to academic ill preparedness or disinterest in their original majors; they exhibited low career self-efficacy and did not know what major or career they should pursue. Despite these problems, they recognized the need to embrace their racial and ethnic identities. For example, Michelle said, “I can’t let me being a Latina get in the way of what I wanna do” (Interview 2). Similarly, Claire said, “I just need to embrace who I am” (Interview 2). This suggests that some participants experienced increased levels of self-efficacy.

Some participants also experienced racial and ethnic identity confusion. For instance, neither Sean nor Isabella was considered to be Latino/a in her home town.

Isabella said, “It’s kinda funny that I’m categorized as Hispanic now [in college], because before I was more of a White Hispanic, because if you had money [in my hometown] you were seen as White, even though you weren’t” (Interview 2). Sean said, “It’s either I’m too White for Hispanic culture, or I’m not White enough for like the culture that we’re in right now which is predominantly White” (Interview 2). Both of these participants were engaging in Chickering and Reisser’s (1993) fifth vector (establishing identity). Isabella and Sean considered their racial and ethnic identities to be a point of emphasis in college and they were integrating these identities into their career development.

It was just really hard because as a Hispanic, I want to show that we’re successful and want to show that just because, you know, I have a Spanish last name or I’ve come from a Mexican background doesn’t mean that I can’t be successful. (Isabella, Interview 2)

Ana and Diego mentioned that their racial and ethnic identities were advantageous in their career development. Ana said, “But I definitely think being a Latina in bioenvironmental science will help me more than anything, because I’ll know two languages, and maybe I can work with both sides of the border” (Interview 2). Diego said, “As Latino, like I said at the beginning, I don’t think about it like every single day, you know, I don’t feel as being disadvantaged the whole day or, you know, feeling as a victim” (Interview 2). He continued, “The positives are that you know a second language You know that being bilingual, you know that understanding and being able to adapt to different cultures, you know, you have that as your benefits”

(Interview 2). Both Ana and Diego believed that their cultural identities, specifically related to language proficiency, would be beneficial when exploring career options, as well as the ability to adapt to other cultures. According to SCCT, Ana and Diego were beginning to overcome racial and ethnic barriers while identifying their career goals.

Balancing Expectations and Personal Desires is Difficult

According to Bullington and Arbona (2001), Latino/a college students are motivated in their academic and career pursuits by high expectations set by their parents. Utilizing Super's theory, Caldera et al. (2003) found that Latino/a students were motivated to surpass their parents rather than to emulate them. In other words, Latino/a college students experience pressure to make correct career decisions, succeed, and surpass the educational and occupational levels of their parents. Consistent with these studies, both first-generation and non-first-generation participants in this study discussed family expectations, as well as the desire to surpass their parents. For example, Santana shared, "My parents expected me to become like something important, like objectively important, like a chemical engineer or a bio engineer or an engineer, period, or a doctor" (Interview 2). Similarly, Pablo said, "I selected my original major because of the expectations my family and friends had for me" (Questionnaire, Q1) and Isabella said, "My dad worked so hard to get out of his position and his like stereotypical situation, that I need to work just as hard to continue moving up and not moving backwards" (Interview 2).

Participants spoke frequently of their need to live up to parental expectations but their personal desires often did not align with family expectations. They were not

passionate about their original major selections and experienced academic difficulty, which contributed to their indecision. Consequently, participants struggled with anxiety and lamented that their children were not living up to the family's expectations. Corkin et al. (2008) found that anxiety in Latino/a college students was positively associated with indecision. Increased anxiety can lead to increased indecision and vice versa. These participants wanted to meet family expectations while simultaneously pursuing their own paths, yet they experienced difficulty and anxiety due to their perceived lack of parental support for their decision to change majors. Pablo maintained that his mother actually supported his decision to change majors but that new expectations were established, causing added pressure for him to select a new major correctly: "I ended up switching [majors], and my mom, she was okay with it . . . but I feel like she has these expectations again" (Interview 2).

Research suggests that perceived lack of parental support has the potential to influence the academic major and career decision-making process of Latino/a college students negatively (Corkin et al., 2008; Flores & O'Brien, 2002; Nora & Crisp, 2009). According to SCCT, participant background variables such as parental support and culture affect career self-efficacy, which affects career choice. Findings from this study align with the literature and suggest that these participants had low career self-efficacy. They were not fulfilling family expectations and did not feel that their families supported their personal desires, resulting in feelings of anxiety and depression. This contributed to their indecision regarding new majors and career paths. Ana characterized this finding by saying, "I just wanna make [mother] proud, but I just feel like I'm not making her

proud right now being not an engineering major, being not a pre-med major” (Interview 2). Ana hated her original major but also felt stressed and anxious in attempting to balance expectations and personal desires.

Balancing Financial Need and Personal Desires Is Difficult

According to Nora and Crisp (2009), Latino/a college students are more likely than White students to come from low-income homes and to require financial aid in college. The majority of the participants in this study, with the exception of Ana, Isabella, and Claire, reported coming from low-income homes. The other participants discussed how financial need (social movement and financial stability) had influenced their desire to attend college, as well as the selection of their original academic majors. They had selected their original majors to provide social movement for themselves, their families, and their communities. They also aspired to financial stability in the future so that they would not have to continue facing the financial issues faced by their parents and families. For example, Pablo said, “I would say that the leading factor to coming to a higher institution is to basically have a better life than I had growing up for my children” (Interview 1).

As their priorities changed from money toward personal interests, these participants experienced conflict when considering new major options. They felt pressure to select a new major quickly because they did not have the financial resources to stay in college long term. For example, Alex shared that he was looking for “what major would be the fastest for me to graduate in” (Interview 2); “I also cannot afford to stay in college for more than 4 years” (Questionnaire, Q3).

The participants continued to feel pressure to select a new major that would still allow for financial stability in the future, which limited their ability to explore their personal interests and desires. Michelle's experience was representative. She said, "Since I don't have money, and you know, my scholarships are for four years, so I feel pressured in a sense that I need to get all my life together in 4 years" (Interview 1).

It's crazy because people tell me like you know "choose a major that you're so passionate in, you know, like something that you love doing." But if I were to do that, I would have chosen Dance. . . . But, you know, I can't have a stable career with that. (Michelle, Interview 2)

In essence, participants experienced difficulty in balancing financial needs and personal desires. They felt compelled to select "correct" majors that would allow them to follow their passions without compromising their financial needs.

For me, a good major is something I'm happy with, but socially speaking, or my other side of me, a good major is something that's respectful, you know, socially, and something that pays good, is what I would say is a respectful major. (Alex, Interview 2)

Ana, Isabella, and Claire did not come from low-income homes; however, they also experienced pressure to select new majors quickly. For example, Isabella shared, "I think it's hard because people expect Hispanics to like be these hardworking people that like are trying to get themselves out of a situation. But that's not where I'm at" (Interview 2). Nonetheless, Isabella's father had convinced her that money should be a motivating factor in selecting a major and career. Isabella ultimately realized that, "I

don't have to make the decision to do something for the money the way [her father] had to" (Interview 2), yet she was fearful of wasting time and money by being undecided. She said, "My first year might be like an absolute waste, and I just would've been here for like absolutely no reason, and that's just like a really, really scary thought . . . both time and money that like feels wasted" (Interview 2). These experiences support a study by Milsom and Coughlin (2015) in which undecided students expressed concern regarding the time and money needed to change academic majors to more satisfying programs.

Findings from this study align with Gordon and Steele's (2015) concept of *choice anxiety* found among undecided college students. Participants in this study experienced societal pressures (e.g., financial need for self and family) that coupled with cultural norms (allocentrism), which intensified their anxiety related to selecting a new academic major (Fouad, 1995; Gordon & Steele, 2015). According to Lent et al. (1994), student backgrounds and contextual variables are important in the framework of SCCT because they affect self-efficacy and outcome expectations. Overall, these participants felt limited when exploring new major options. They were pressured to select new majors quickly and correctly, while concurrently attempting to identify their personal interests and align their decisions with financial needs.

First-Generation Students Face Added Complexity

In this study, first-generation participants faced added complexity during their experiences of being undecided about academic majors. When compared to non-first-generation participants, first-generation participants more often discussed coming from

low-income homes, focused on financially supporting their current families, lacked family assistance when examining new majors, and lacked knowledge of how to change majors. These findings are consistent with the literature related to first-generation college students. Research suggests that first-generation college students have limited role models to guide them through the higher education experience; moreover, they are more likely to come from low-income backgrounds, to be pressured to obtain a career that could improve the family's condition, and to be focused on expediting the completion of coursework in comparison non-first-generation peers (Gamboa & Vasquez, 2006; Hottinger & Rose, 2006).

Findings related to lack of family assistance when examining new majors and lack of knowledge regarding how to change majors are salient for undecided Latino/a students. These participants did not have access to family members who could assist them in examining major options, resulting in the participants feeling lost and alone. Michelle's experience illustrated this issue.

Since I was the first generation, I couldn't go to my parents or anybody in my family to talk to them about, "Hey, you know, I'm deciding on what major I wanna be," because they didn't know any better than what I knew. (Interview 2)

Michelle was lost when trying to learn how to change majors: "Well, I felt lost, that's like if I had to put it in one word, lost. I had no idea what to do, and I didn't know how to begin research" (Interview 2).

First-generation participants were engaging in Chickering and Reisser's (1993) first vector (developing competence). Independently, these participants were attempting

to acquire knowledge about major options and the process of changing majors. This created barriers for some of them. Diego stated that one of the largest challenges to selecting a new major was “not having any knowledge of how to change a major” (Questionnaire, Q3). Likewise, Pablo said, “A major issue that really affected my ability to switch was the very convoluted process of actually switching majors” (Questionnaire, Q3). These findings are consistent with a study by Galilee-Belfer (2012), who found that undecided students are often uninformed regarding how academic majors work and how to make informed career decisions. Essentially, undecided first-generation students needed to develop competencies regarding educational offerings and institutional policies related to changing majors without assistance from family members. Pablo described how being undecided and a first-generation college student complicated his experience.

If you’re a first-generation college student, getting through college is like walking through a dark room with objects everywhere. So, basically, like you’re bumping into things, like these are like obstacles in your way to graduating . . . [by being undecided]. Now it’s like walking through the dark room with your eyes closed. *You add another layer of blindness basically.* . . . It’s kind of concerning because like I said, a lot of Latino or Latinas are first-generation college students, that doesn’t mean that they don’t know what they wanna do, you know? They obviously have passion and drive and they know a lot of them, you know? Then there’s me. . . . Maybe I’m doing something wrong or whatever, like there’s underlying doubts sometimes. (Interview 2, emphasis added)

Consistent with the literature, first-generation participants experienced added pressured to achieve careers that could improve their family's conditions and surpass their parents (Gamboa & Vasquez, 2006; Hottinger & Rose, 2006). These findings are similar to those shared in the section on balancing financial need and personal desires. For example, Pablo said, "Ultimately, my career, I would like for it to be able to provide back to my family. . . . My mom always worked hard for us . . . and I just wanna take care of her when she's older" (Interview 1). Sean shared, "That's what [his parents] wanted, was me to not live the life that they lived, because to them it was extremely difficult (Interview 1). Thus, first-generation participants felt pressure to move themselves and their families forward, which affected their self-efficacy. Being undecided, they felt shame, guilt, selfishness, and fear about selecting a major that would not allow them to graduate quickly or provide the opportunity to improve their family's condition.

Latina Students Face Added Complexity

Risco and Duffy (2010) found gender differences among Latino and Latina college students regarding their academic major and career decision making. According to their study, Latinas were more likely than Latinos to experience gender barriers such as sex discrimination or to clash with gender expectations regarding their major and career choices (Risco & Duffy, 2010). Berríos–Allison (2011) found that Latino/a college students were often expected to serve as role models for their families, as well as for other Latinos/as.

Consistent with both of those studies, female participants in the current study discussed their need to challenge gender stereotypes and serve as role models. Karina's experience exemplified this concept. "I wanna do something with myself that isn't like what people . . . I guess not expect, but you know, the stereotypical 'she's gonna get pregnant like really young' or 'she's gonna get addicted to drugs' or something" (Interview 1). Moreover, Karina said, "So I mean I guess you could say we're like setting the example for all of the other little kids that aren't there yet" (Interview 2).

Where I'm from . . . it's just the idea there was like, you know, have babies, be a housewife, support your husband, you know, just cook, clean around the house, like that's all you're gonna do. And I wanna show, you know, definitely females down there like hey, there's so much more to life than just being that. (Michelle, Interview 1)

Ana, Claire, Isabella, Karina, Michelle, and Olivia each spoke about challenging stereotypes and/or serving as role models. Claire and Ana specifically reported incidents of sex discrimination. Claire maintained that her male counterparts in the sciences did not expect her to succeed in sciences because she was a woman. Similarly, Ana maintained that certain majors, such as STEM options, were more masculine: "Not only am I a female in a STEM major. I'm in like a bio environmental science thing, you know, like it sounds more manly" (Interview 2). These findings align with research about Latino/a cultural values, especially related to *respeto* (deference paid to gender) and *machismo* (different standards of behavior held for men and women; Fouad, 1995).

Findings related to Latina participants in this study are important to consider in relation to Chickering and Reisser's (1993) fifth vector (establishing identity) and sixth vector (developing purpose). Participants' identities as females intersected with their cultural and career identities. In essence, gender stereotypes and expectations influenced the female participants' self-concepts, as well as their decision-making processes, as they explored major and career options. These female participants were undecided about their majors and wanted to change their educational pursuits. This prompted feelings of regret or pressure to select new majors that still allowed them to serve as role models. Ana captured this concept: "I just wanted to break barriers, you know, Hispanic, you know, a Latina in a White man's job" (Interview 2). However, by being undecided, she "felt shunned, like I'm not out to break barriers anymore, I'm not living up to expectations" (Interview 2).

Recommendations for HRD Practice

Cummings and Worley (2005) defined CD as "helping individuals achieve their career objectives. It follows closely from career planning and includes organizational practices that help employees implement those plans" (p. 418). Traditionally, CD has been described as a relationship between employees and HRD practitioners in the context of the workplace (Egan et al., 2006). Yet, findings from this study suggest that CD initiatives may be relevant in higher education. Colleges and universities are charged with developing HRD practices that help college students to implement their major and career goals (student CD). Therefore, in the framework of HRD, student learning and performance may be improved at the individual, group, and organizational levels

(Swanson & Holton, 2009). The following recommendations for HRD practice are suggested: (a) T&D for CD professionals in higher education, (b) mentoring for undecided Latino/a college students, (c) CD courses for undecided students, and (d) institutional policies that can aid in the exploration process.

T&D for CD Professionals

According to Swanson and Holton (2009), T&D is the largest component of HRD. McLean (2006) identified T&D as an individual-level intervention within organization development. T&D has been defined as “a process of systematically developing work-related knowledge and expertise for the purpose of improving performance” (Swanson & Holton, 2009, p. 226). Within the context of higher education, Gordon (2007) warned that CD professionals (e.g., career advisors) might inadvertently ignore the potential role of students’ cultural identities in the major selection process. CD professionals in higher education may require training to help them to understand the experiences and culture of undecided Latino/a college students in order to enhance their performance when serving this student population. This training would be especially salient for advisors who are culturally different from their students (Gordon & Steele, 2015).

Findings from this study suggest that undecided Latino/a college students experience difficulty when balancing family expectations, financial and time needs, cultural and gender barriers, and the need for self-exploration in attempting to identify new academic majors. In multiple instances, participants talked about lacking knowledge related to their interests and skills; moreover, they lacked the time and resources

necessary to explore their interests completely. As a result, they felt rushed and stressed when considering new major options. In other words, their backgrounds and personal characteristics were limiting their self-efficacy, outcome expectations, and career goals, which is consistent with SCCT. These participants could not simply explore academic major options; their contexts needed to be taken into consideration.

Traditional career advising in higher education may not adequately consider social influences in the career decision-making process (Gordon, 2006). Thus, training for career advisors is pivotal and should include information about CD theory, student development theory, and cultural identity development, as well as issues that affect Latino/a student career development (e.g., barriers and discrimination, family influence). Career advisors must understand how cultural identity and context can interplay in the major and career decision-making process among undecided Latino/a college students.

Mentoring for Undecided Latino/a College Students

A few participants discussed coping strategies that they had utilized to navigate their experiences as undecided Latino/a college students. These strategies included mentorship from professional staff, peer mentorship, and identifying role models in a student organization. According to Carlstrom, Kaff, and Low (2009), mentors and role models for racial and ethnic minority students can help those students to “build the confidence to pursue a career path, expand the occupations that students may consider as ‘open’ to members of their racial/ethnic group, and provide support to help with the social and emotional consequences of confronting racial discrimination and barriers” (p. 118). Yet, Latino/a administrators, faculty, and staff are the minority in higher

education and Latino/a students often have limited role models to mentor and guide them (Gamboa & Vasquez, 2006). Therefore, it is recommended that HRD personnel establish formal individual mentor and peer-mentor programs or group mentoring programs for undecided Latino/a college students.

McLean (2006) identified mentoring as an individual-level intervention in OD, stating that “the objective of mentoring is to help individuals take advantage of opportunities for career and personal enhancement” (p. 109). Essentially, formal mentoring allows for individuals who might not otherwise have access to informal role models to still receive mentoring (McLean, 2006). Gordon and Steele (2015) found that mentoring has been identified as one of the most desirable career interventions for racial and ethnic minority students. Establishing a formal mentoring program for undecided Latino/a college students could address their feelings of loneliness, shame, and pressure.

Berríos-Allison (2011) found that mentoring and support groups aided Latino/a students as they maneuvered through the college climate and career decision-making process. These groups allowed for preservation of cultural norms such as *familismo* by replicating “a Latino natural support system” (Berríos-Allison, 2011, p. 84). Ultimately, undecided Latino/a college students would be able to examine and discuss their experiences in individual or group mentoring relationships, thereby minimizing the impact of being undecided.

Career Development Courses

According to Gordon and Steele (2015), CD courses can aid undecided college students in their self-exploration and career decision making. These courses can also

serve as group-level interventions (McLean, 2006). Hansen and Pedersen (2012) studied the effects of CD courses on undecided students' career self-efficacy, adjustment to college, learning integration, and academic success. They found that undecided students who enrolled in career development courses had significantly higher retention rates than undecided students who were not enrolled in those courses. Moreover, students enrolled in courses showed significant increases in career self-efficacy and adjustment to college (Hansen & Pedersen, 2012). In other words, CD courses have the potential to increase undecided students' career self-efficacy and improve career decision making.

Gordon and Steele (2015) also posited that mandatory CD classes allow undecided students to receive information without their being singled out as undecided. Findings from the current study showed that participants felt alone, lost, embarrassed, and ashamed because they were undecided; furthermore, they lacked self-awareness and knowledge regarding academic majors and the major-changing process. A mandatory CD course for incoming freshmen might create a safe space for undecided Latino/a students to explore options and develop community, thereby showing these students that they are not alone in their indecision. Collectively, students could discuss their motivators for attending college, reasons for selecting their original major, reasons for indecision, and the impact of being undecided.

Buyarski (2009) suggested that CD courses can “integrate major and career exploration into topics of college transitions and success” (p. 232). Since participants in the current study experienced culture shock, racial and ethnic issues, and academic difficulty during their first 2 years of college, a mandatory CD course could serve two

purposes: (a) aid Latino/a students with college transition by introducing them to other students with similar experiences, and (b) incorporate major and career exploration to help them examine the career decision-making process. Thus, students would be exposed to major options, the major-changing process, and tools for exploration while interacting with other students in a shared experience. Similar to Hansen and Pedersen's (2012) study, students enrolled in the CD course could increase their career self-efficacy and adjustment to college.

Higher Education Policies

Schein (2004) described culture as a collection of shared basic assumptions, beliefs, and values among members of an organization that establishes behavioral norms and thinking within the organization. The value placed on academic major and career exploration is essentially part of the culture of an institution of higher education. If a college or university requires students to select academic majors too quickly, the institution might not be allowing students to engage fully in the exploration stage of Super's (1957) theory. Moreover, if a college or university does not incorporate interventions such as training for CD professionals, mentoring programs, or CD courses, the institution potentially sends a symbolic message about its values regarding major and career exploration.

McLean (2006) identified culture change as an organizational-level intervention in OD. HRD practitioners can shape the culture at institutions of higher education by helping them to create policies and procedures that support undecided Latino/a college students. For example, colleges can mandate CD seminars for all incoming freshmen.

Another example would be a policy that delays students' selection of a major until after completion of the freshman year, allowing students time to examine their major and career options critically.

However, it is important to note that every action or solution may create new problems (McLean, 2006). Such mandates would be policy issues that would affect budgeting and staffing at the college. Ultimately, if an institution of higher education wanted to incorporate career exploration into its culture, it could utilize HRD practitioners as consultants who might facilitate the change process.

Recommendations for HRD Theory

In addition to providing recommendations for HRD practice, this study points to how CD theories and student development theories may be integrated to understand the problems of undecided Latino/a college students. Traditionally, CD has been described as a relationship between employees and HRD practitioners, within the context of the workplace (Egan et al., 2006). As such, HRD theories specifically related to career development do not focus on college students per se. For instance, Super's (1957) theory focuses on CD throughout the lifetime and SCCT emphasizes career decision making rather than developmental tasks. As a result, SCCT may be complementary to Super's (1957) theory. Super's (1957) theory was created by studying White males and does not completely take into consideration how culture may influence CD. Findings from this study show that racial and ethnic identity and CD intersect; therefore, it may be salient to explore how Super's (1957) theory can be expanded to incorporate ethnic and cultural impacts.

On the other hand, student development theory often does not specifically address CD. Within Chickering and Reisser's (1993) vectors theory, the sixth vector (developing purpose) can potentially incorporate CD. Yet, as evidenced by this study's findings, Vector 1 (developing competence), Vector 3 (moving through autonomy toward interdependence), and Vector 5 (establishing identity) may also be relevant when examining the experiences of undecided Latino/a students and their CD. As a result, it may be important to examine how Chickering and Reisser's (1993) theory may be expanded to address CD issues associated with undecided Latino/a students, such as cultural barriers and expectations.

Recommendations for Future HRD Research

In this research effort, multiple areas for future HRD research emerged. First, this study specifically examined Latino/a college students. According to Gordon and Steele (2015), there is a lack of research on undecided students from other racial and ethnic minority groups, as well. An area for further research would be qualitative studies to explore the experiences of being undecided about academic majors for Asian, African American, and Native American college students, as well as other racial and ethnic minority groups. Studies could be conducted to compare reasons for indecision and impacts of being undecided among minority groups.

Second, all 11 participants identified as being of Mexican origin. This study was delimited to Texas. Texas is heavily populated by Latinos/as, who constitute 39% of the state's population; furthermore, 87% of the Latinos/as in Texas identify as being of Mexican origin (Pew Research Center, 2016b). Texas ranks second in the United States

for total Latino/a population in a state (Pew Research Center, 2016b); 13% of the Latinos/as in Texas identify as being of non-Mexican origin (e.g., Puerto Rican, Cuban, Dominican; Pew Research Center, 2016b). An area for further research would be exploration of the experiences of being undecided about academic majors for Latino/a college students who do not identify as being of Mexican origin.

This research would be salient for areas in the United States that are also heavily populated by Latinos/as but where Latinos/as identify as being of non-Mexican origin. For example, Florida ranks third in the United States for total Latino/a population in a state (Pew Research Center, 2016a). Latinos/as constitute 24% of Florida's population; however, only 14% of the Latinos/as in Florida identify as being of Mexican origin (Pew Research Center, 2016a). These demographics are essentially the opposite of those in Texas. Further research should be conducted to examine Latinos/as of non-Mexican origin, as well as studies comparing Latino/a subgroups or comparing national regions.

Third, this study did not separate male and female participants. Findings from this study suggest that undecided Latinas face added complexity when experiencing indecision regarding their academic majors. Female participants identified gender barriers to majors, as well as gender stereotypes and expectations to serve as role models for their families and other Latinas. Since this study did not focus on comparing male and female experiences, differences between undecided Latinos and undecided Latinas warrant further examination.

Fourth, this study did not separate first-generation and non-first-generation participants. Findings from the study suggest that undecided first-generation students

also face added complexity when experiencing indecision regarding their majors. First-generation participants discussed the need to support their current families financially, the lack of family assistance when examining majors, and not having the knowledge related to the major changing process. Comparison studies between first-generation and non-first-generation undecided Latino/a college students could identify similarities and differences between these two groups of students.

Fifth, three study participants described coping strategies that have aided them with the impact of being undecided. However, the examination of coping strategies was not a focus of this study. Further analysis of the strategies utilized by undecided Latino/a college students to deal with the impacts of being undecided could be a key area for HRD research.

Sixth, study participants were selected from a 4-year PWI of higher education. According to Santiago (2011), 49% of Latino/a college students are enrolled at community colleges and 50% of Latino/a undergraduates are enrolled at Hispanic Serving Institutions (HSI), which are schools that participate in a federal program designed to aid first-generation, low-income Latino/a college students (Santiago, 2011). Institutional context may have an impact on the experience of being undecided about academic majors for Latino/a college students who are changing their academic majors. Therefore, future HRD research could examine the experiences of undecided Latinos/as at HSIs in comparison to the experiences of those who attend PWIs.

Conclusions

The experience of being undecided about academic majors is difficult for Latino/a college students who are changing their majors. Participants in this study had originally opted to attend college to meet family expectations; generate personal, family, and community social movement; prepare for careers; embrace educational opportunities; and refute stereotypes. They selected their original majors due to family pressure, as well as the hope for financial stability and employability. However, they lacked self-awareness and did not explore their options prior to selecting their original majors. During college, their priorities changed, they experienced racial and ethnic issues, they discovered a lack of passion for their majors, and they experienced academic difficulty. In short, every participant wanted to change from his or her original major but was undecided about what new major to select. As a result of being undecided, they felt alone and lost, anxious about the future, ashamed and selfish, pressured to be role models, stressed for time, and fearful of selecting a new major that would be deemed as wrong.

These participants mentioned coping strategies that had helped them during the experience of being undecided. Strategies included becoming involved in Latino/a student organizations and identifying Latino/a mentors and other Latinos/as who were experiencing similar indecision about majors. They demonstrated low career self-efficacy, were establishing their identities and developing their purpose, were developing competencies, and were wrestling with issues of autonomy. The findings from this study suggest that HRD professionals, specifically CD professionals, can aid

these students throughout their experiences. Ultimately, this study provides fresh insight for CD professionals who seek to assist undecided Latino/a college students; it also contributes to the HRD literature related to higher education.

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APPENDIX A

IRB APPROVAL

DIVISION OF RESEARCH



Submission Approval DATE: February 13, 2017

MEMORANDUM

TO: Larry Dooley
TAMU - College Of Education & Human Dev - Educational Adm & Human Resource Develop

FROM: Dr. David Martin
Chair, TAMU IRB

SUBJECT: Approval for Initial Review Submission Form REF: 049211

Study Number: IRB2017-0048M

Title: Career Development for Undecided Latino/a College Students: A Phenomenological Study

Initial Application 02/13/2017

Approval Date:

Continuing Review Due: 01/01/2022

Expiration Date: 02/01/2022

Documents Reviewed and Approved:

Only IRB-stamped approved versions of study materials (e.g., consent forms, recruitment materials, and questionnaires) can be distributed to human participants. Please log into iRIS to download the stamped, approved version of all study materials. If you are unable to locate the stamped version in iRIS, please contact the iRIS Support Team at 979.845.4969 or the IRB liaison assigned to your area.

Submission Components			
Study Document			
Title	Version Number	Version Date	Outcome
Signed IRB NDA Riedesel Dooley IRB2017-0048	Version 1.2	01/30/2017	Approved
Signed IRB NDA Riedesel Dooley IRB2017-0048	Version 1.1	01/30/2017	Void
Michael Shehane TAMU Non-Disclosure Agreement	Version 1.0	01/30/2017	Void
Michael Shehane - Appendix G (Open-ended Questionnaire)	Version 1.0	01/30/2017	Approved
Michael Shehane - Appendix F (Interview Guide)	Version 1.0	01/30/2017	Approved
Michael Shehane - Appendix B (Recruitment Email)	Version 1.0	01/30/2017	Approved
Study Consent Form			
Title	Version Number	Version Date	Outcome
Michael Shehane - Appendix E (Informed Consent Form)	Version 2.2	01/30/2017	Approved
Michael Shehane - Appendix E (Informed	Version 2.1	01/30/2017	Void

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APPENDIX B

RECRUITMENT EMAIL

Howdy friends and colleagues:

I have recently received authorization to move forward with my dissertation study on undecided Latino/a college students. I am currently in the recruitment stage and am looking for college students who identify as being undecided about an academic major, identify as being Latino/a, identify as being a freshman or sophomore student (i.e., U1 or U2 classification), and are changing their academic major. I have included some language below that may be sent to anyone who may be interested.

Please know that if you do not feel comfortable providing this information to students or you would prefer not to do so, I completely understand.

Howdy!

My name is Michael Shehane and I am a doctoral student in the College of Education & Human Development at Texas A&M. I am conducting a study focused on Latino/a college students who are changing their academic majors. I am looking for college students who identify as being Latino/a, identify as being undecided about an academic major, identify as being a freshman or sophomore student (i.e., U1 or U2 classification), and are changing their academic major.

The time required for involvement in this study is minimal. Participants will be asked to meet me in two rounds of interviews that will last 45 to 90 minutes each round. Following the second interview, you will be asked to complete a brief questionnaire to give you another opportunity to expand upon your story.

Information collected in this study is for my dissertation process as a student. The information collected will be kept confidential, pseudonyms will be used, and only the primary researchers will have access to the information gathered.

If you are interested in participating please contact me at shehane@tam.u.edu or 979-845-0614. Potential participants will be provided with additional information about the study via email and at the time of participation. Thank you very much!

Michael Shehane
Ph.D. Candidate, Texas A&M University

APPENDIX C

PARTICIPANT DEMOGRAPHIC INFORMATION SHEET

Career Development for Undecided Latino/a College Students: A Phenomenological Study

Thank you for your interest in participating in this research study about undecided Latino/a college students who are changing their academic majors. In order for me to select a group of participants, please take a moment to answer the following questions. Your name and responses will remain confidential and will not be shared with anyone else in association with your real name. Any information shared will be done so only through the use of your pseudonym.

Name:

Telephone Number:

Email Address:

Demographic Information

Sex/Gender:

Race/Ethnicity:

Age:

Academic Information

University Name:

Academic College Name:

Current Academic Major(s):

Original Academic Major(s):

Classification (i.e., U1, U2, U3, or U4):

Pseudonym

Please select a pseudonym for use in the study:

APPENDIX D

INFORMED CONSENT DOCUMENT

Project Title: Career Development for Undecided Latino/a College Students: A Phenomenological Study

You are invited to take part in a research study being conducted by Michael Shehane, a researcher from Texas A&M University and funded by himself. The information in this form is provided to help you decide whether or not to take part. If you decide to take part in the study, you will be asked to sign this consent form. If you decide you do not want to participate, there will be no penalty to you, and you will not lose any benefits you normally would have. You may choose to withdraw from the study at any time without penalty. NOTE: If you are employed then it is your responsibility to work with your employer regarding work leave for participation in this study if during work hours.

Michael Shehane, Protocol
Director
shehane@tamu.edu

Dr. Larry Dooley, Principal
Investigator
l-dooley@tamu.edu

Why Is This Study Being Done?

The purpose of this study is to explore the experience of being undecided about academic majors for Latino/a college students who are changing their academic majors. You were selected to be a possible participant because you self-identify as being Latino/a and are changing your academic major. This study is being conducted to fulfill the requirements for the completion of a dissertation.

Why Am I Being Asked To Be In This Study?

You are being asked to be in this study because you identify as being undecided about an academic major, identify as being Latino/a, identify as being a freshman or sophomore student (i.e., U1 or U2 classification), and are changing your academic major at a four-year, bachelor degree granting institution of higher education. Before you can enroll in the study, and after you sign this form, your study doctor will perform certain tests and procedures and ask you to provide some information about your history to determine whether or not you can continue in the study.

How Many People Will Be Asked To Be In This Study?

Between 5 and 25 people (participants) will be invited to participate in this study locally.

What Are the Alternatives to being in this study?

The alternative to being in the study is not to participate.

What Will I Be Asked To Do In This Study?

You will be asked to participate in two rounds of face-to-face interviews that will last 45 to 90 minutes each round. You may also be contacted after the interviews for clarification purposes. In order to ensure accuracy of the information collected, each round of interviews will be audio recorded and hand-written notes will be taken. Following the interviews, you will be asked to complete a brief questionnaire in order to give you another opportunity to expand upon your story. Your participation in this study will last up to three total hours spread across two weeks and includes two visits.

Visit 1 (Week 1)

This visit will last about 45 to 90 minutes. During this visit you will be asked questions about your journey to college.

Visit 2 (Week 2)

This visit will last about 45 to 90 minutes. During this visit you will be asked questions about your selection of academic major, change of academic major, and experience with being undecided about academic major.

Final task (Week 2)

Following the second interview, you will be emailed a questionnaire that should take 15 to 20 minutes to complete. The questionnaire is designed so that you have another opportunity to expand upon your story.

Will Photos, Video or Audio Recordings Be Made Of Me during the Study?

The researchers will make audio recordings during the study to ensure accuracy of the information collected only if you give your permission to do so. Indicate your decision below by initialing in the space provided.

_____ I give my permission for audio recordings to be made of me during my participation in this research study.

_____ I do not give my permission for audio recordings to be made of me during my participation in this research study.

Are There Any Risks To Me?

The risks associated in this study are minimal. The things that you will be doing are no more than risks that you would come across in everyday life. The primary risks are emotional or psychological in that explaining one's experience might stir strong emotions. The researcher will also work to protect the privacy and confidentiality of the participants by using a pseudonym for each participant, but the risk for a breach of privacy and confidentiality does exist.

Although the researchers have tried to avoid risks, you may feel that some questions/procedures that are asked of you will be stressful or upsetting. You do not have to answer anything you do not want to.

Are There Any Benefits To Me?

You will receive no direct benefits from participating in this study. However, the information gained in this study has the potential to assist Human Resource Development professionals develop meaningful career development interventions for Latino/a college students who are undecided about their academic majors.

Will There Be Any Costs To Me?

Aside from your time, there are no costs for taking part in the study.

Will I Be Paid To Be In This Study?

You will not be paid for being in this study.

Will Information From This Study Be Kept Private?

The records of this study will be kept private. No identifiers linking you to this study will be included in any sort of report that might be published. Research records will be stored securely and only Dr. Larry Dooley and Michael Shehane will have access to the records. Recordings will be transcribed in two weeks by a third party transcriptionist. Audio files will be destroyed in four weeks.

Information about you will be stored in a locked file cabinet. This consent form will be filed securely in an official area.

Information about you and related to this study will be kept confidential to the extent permitted or required by law. People who have access to your information include the Principal Investigator and research study personnel. Representatives of regulatory agencies such as the Office of Human Research Protections (OHRP) and entities such as the Texas A&M University Human Research Protection Program may access your records to make sure the study is being run correctly and that information is collected properly.

Who may I Contact for More Information?

You may contact the Principal Investigator, Dr. Larry Dooley, to tell him about a concern or complaint about this research at 979-845-5300 or l-dooley@tamu.edu. You may also contact the Protocol Director, Michael Shehane, at 979-845-0614 or shehane@tamu.edu.

For questions about your rights as a research participant, to provide input regarding research, or if you have questions, complaints, or concerns about the research, you may call the Texas A&M University Human Research Protection Program (HRPP) by phone

at 1-979-458-4067, toll free at 1-855-795-8636, or by email at irb@tamu.edu. The informed consent form and all study materials should include the IRB number, approval date, and expiration date. Please contact the HRPP if they do not.

What if I Change My Mind About Participating?

Your participation in this research is voluntary, and you have the choice whether or not to be in this research study. You may decide to not begin or to stop participating at any time. If you choose not to be in this study or stop being in the study, there will be no effect on your academic standing as a student with Texas A&M University.

STATEMENT OF CONSENT

I agree to be in this study and know that I am not giving up any legal rights by signing this form. The procedures, risks, and benefits have been explained to me, and my questions have been answered. I know that new information about this research study will be provided to me as it becomes available and that the researcher will tell me if I must be removed from the study. I can ask more questions if I want and I can still receive services if I stop participating in this study. A copy of this entire consent form will be given to me.

Participant's Signature

Date

Printed Name Date

INVESTIGATOR'S AFFIDAVIT:

Either I have or my agent has carefully explained to the participant the nature of the above project. I hereby certify that to the best of my knowledge the person who signed this consent form was informed of the nature, demands, benefits, and risks involved in his/her participation.

Signature of Presenter

Date

Printed Name

Date

APPENDIX E

INTERVIEW GUIDE

Career Development for Undecided Latino/a College Students: A Phenomenological Study

Interviewee: _____

Date: _____ Time: _____ Location: _____

Welcome and Introductions

- Introductions
- I will be recording this interview and taking hand-written notes.

Overview of the Interview Purpose and Consent Form

- The purpose of this interview is to learn about your experience as a Latino/a college student who is undecided about your academic major.
- Review the consent form and obtain signatures.
- I may contact you later for clarification purposes.

Interview Questions – the following interview questions will be used to guide, not limit, the conversation.

Round 1

1. Tell me about your story and what growing up was like for you.
2. Tell me about your journey to college.
3. What was your thought process in choosing to attend college?
4. Why are you attending college?

Round 2

1. How did you select your original academic major when entering college?
2. What influences impacted the original selection of your academic major?
3. Why are you changing your academic major?
4. Tell me, in detail, about your experience of being Latino/a and experiencing indecision regarding your academic major.
5. What challenges, if any, have impacted your ability to select a new academic major?
6. What else would you like to share about your process of changing academic majors?

7. Do you have any additional information you would like to share with me today?

Following the Interview

- I will briefly summarize the primary discussion points.
- Following the interviews, I will have the interviews transcribed. A copy of the transcription will be sent to you for review and revision.

APPENDIX F

SAMPLE PEER DEBRIEFING MEMO

From: Shehane, Michael E
To: [Dooley, Larry M](#)
Subject: Dissertation - Peer Debriefing Memo (Round 2, Interview #1)
Date: Thursday, March 09, 2017 3:17:00 PM
Importance: High

██████ Dr. Dooley,

I just completed the second round interview for “Ana.” This was by far the most emotional interview I’ve experienced thus far. Ana discussed the role her parents played in initially selecting engineering and math as her major, as well as how engineering and math did not interest her. She switched majors to biology to be pre-med (at the insistence of her mother), but hates it. She wanted to make her mom proud as well as make good money. Ana is actually passionate about bioenvironmental sciences and education, but feels like she’s letting her family down if she pursues those interests. Since Ana is feeling undecided, she feels somewhat shunned by her mom and that she’s not living up to expectations.

Ana also mentioned how hard it is being Latina at ████████ a predominately White institution. She wants to prove people wrong and that she can succeed at ████████ (Ana specifically said she’s just as good as the White students). But she said it’d be easier in a STEM major if she was White. From her perspective, all the other students in engineering, math, and biology are mostly White kids with blonde or dirty blonde hair. Ana even opened up about a time when she experienced direct racial discrimination in ████████ Finally, throughout the time Ana discussed racially specific issues, she did not make eye contact with me ... even apologizing later for not looking me in the eyes.

All in all, Ana and I had a very deep, meaningful conversation, which ended with her reflecting over why she’s at ████████ She expressed love for ████████ a student organization that helped her transition both socially and personally into college.

After finishing this second round interview, I fully realize how ESSENTIAL it is to conduct two rounds of interviews with my participants. I don’t feel that Ana would have been this open and honest if we met only one time. The first round interview truly allowed me to establish rapport and trust with this fantastic student.

Thank you so much for sharing in this journey with me Dr. Dooley!

Sincerely,
Michael Shehane

APPENDIX G
QUESTIONNAIRE

**Career Development for Undecided Latino/a College Students:
A Phenomenological Study**

Pseudonym: _____ Date: _____ Time: _____

Overview of the Questionnaire Purpose

- The purpose of this questionnaire is to give you an opportunity to expand upon your story as a Latino/a college student who is undecided about your academic major.
- I may contact you later for clarification purposes.

Questions

1. Why did you select your original academic major?

2. Why are you changing your academic major?

3. What issues have impacted your ability to select a new academic major?

APPENDIX H

DATA ANALYSIS SAMPLE

Selection of original major	<p>Family pressure (light green)</p> <ul style="list-style-type: none"> I remember bringing up different career choices to my mom, and she would not put as much attention to it as engineering or those good career choices, quote/unquote (Alex, Interview 1, p. 3). It was like I never really considered other majors since ... I kinda wanted to, how can I say it, please my mother by going in a route that she would be proud of, in a field that she would be proud of (Alex, Interview 2, p. 1). My cousins on my dad's side of the family all predominantly several of them have been engineers or studied engineering. So I kinda felt like that was my path, and I didn't really question it (Alex, Interview 1, p. 2). Because I'm a Latina, because I speak Spanish, because I have such high grades, [my mom] wants more from me. And I guess she knows I have so much more of a potential than being a teacher (Ana, Interview 1, p. 8). So I always wanted to do actually bioenvironmental science, but mom told me it's not a real major, can't really do much with it, so I gotta think realistically (Ana, Interview 2, p. 3). [My parents] both had a really big influence on what major I guess I picked, more so my dad than my mom (Isabella, Interview 1, p. 3). I was really into marine biology because that's just something I'm extremely passionate about. But like any time I brought it up to my dad, it was more of like "what are you gonna do with that? Like there's no money in that. No" (Isabella, Interview 1, p. 4). Whenever I discussed it with my mom, she told me ... you're gonna go study, not for stupid stuff like, you know, you can't go study dance, like you're not gonna make money or get a career doing dance (Michelle, Interview 2, p. 2). I selected my original major because of the expectations my family and friends had for me to become a successful doctor ... I decided biology would be the best choice for me in order to reach the goal that was imposed onto me (Pablo, Questionnaire, Q1). I would say it was more pressure from my family, because they expected a lot from me, and they were like "well you know like what's the biggest thing we can expect from [Pablo]? Like he's gonna be a doctor" (Pablo, Interview 2, p. 3). My mom likes to brag, so she'd say to my aunts and uncles and my cousins like "yeah, [Pablo] is gonna be an anesthesiologist or a neurologist." I mean like you're around that so much that, like I said earlier, like yeah, I'm gonna be a neurologist or so on, so it's like imprinted in your mind (Pablo, Interview 1, p. 18). My brother is also going into [journalism] and my sister was going into it ... my tia actually is a journalist (Santana, Interview 2, p. 2). My parents expected me to become like something important, like objectively important, like a chemical engineer or a bio engineer or an engineer, period, or a doctor, you know, something where the practical use of that degree would help everything. It was something big like that (Santana, Interview 2, p. 4). So [my tio] was like "so what are you gonna be doing, what are you finally gonna be doing?" I'm doing journalism, and like the look on his face was kinda like, it looked destroyed (Santana, Interview 2, p. 4). I selected my original major because my brother suggested it for me (Sean, Questionnaire, Q1). My brother was like "hey, you should be an engineer, I feel like that's what you should do. I mean you're good at math, and yeah, I think that's what you should do." I'm like okay, so I applied as an engineer for here (Sean, Interview 2, p. 3). <ul style="list-style-type: none"> Lack of family guidance (maroon) – 1st gen only <ul style="list-style-type: none"> Since [my family] didn't have too much education, then I couldn't really turn to them as to say "Hey, what do you think would be the most appropriate major for me?" (Diego, Interview 2, p. 6). It's the fact that since my parents don't have like professional degrees, I couldn't really ever turn to them in terms of ... big decisions in terms of like hey, what do you think would be the best major if I like this? (Diego, Interview 2, p. 10). Since I was the first generation, I couldn't go to my parents or anybody in my family to talk to them about hey, you know, I'm deciding on what major I wanna be, because they didn't know any better than what I knew (Michelle, Interview 2, p. 3). Because me being a first-generation college student, no one really has been to college in my family ... Since no one really went to college, I can't really talk to anyone about what major I should choose ... [my parents] really don't have
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	<p>that much of a higher education, so I really can't make any decisions based off what they tell me because they don't know what to say (Sean, Interview 2, p. 5).</p> <p>Financial stability (purple)</p> <ul style="list-style-type: none"> • Having an engineering degree meant I guess a safe zone, by having an engineering degree, I wouldn't have to worry about money or things like that (Alex, Interview 1, p. 7). • So whenever I was choosing what kind of engineering, because there's multiple types of engineers, I remember I would just Google highest paying jobs, highest paying bachelor's, and I came across petroleum engineering (Alex, Interview 1, p. 7). • I had the belief that getting an engineering degree would bring job security and financial stability in my life (Alex, Questionnaire, Q1). • The fact that it pays well ... I know the pay is really well, engineers get paid really well (Diego, Interview 2, p. 4). • [My dad] made me think that the money should mean something to me (Isabella, Interview 2, p. 5). • I was also thinking that I could make more money in that field of work, than my second major options which was education (Karina, Questionnaire, Q1). • I ended up choosing environmental studies because I knew that I had more chance of making more money if I went into this major than if I went into teaching (Karina, Interview 2, p. 4). • Money. Yeah, so that's always what I look into whenever I'm trying to decide for a degree, just to make sure you know I'll be financially stable later on with my career (Michelle, Interview 2, p. 4). • Whenever I'm looking into a major, the biggest thing that drives me, and even if it's bad to say, like I admit it, it's money, at the end of the day it's always been money for me (Michelle, Interview 2, p. 17). • I was like I'm gonna pick the medical specialization that just gives you the most money (Pablo, Interview 1, p. 11). <p>Employability (silver)</p> <ul style="list-style-type: none"> • Not having to worry about what to do after I graduate. That was another thing, employability, like finding a job afterwards (Alex, Interview 2, p. 4). • I applied with mathematics because I could do something with it. And I didn't really like math, so I changed it to bio because you know I was thinking alright, you're right, mom, education, being a teacher won't get me anywhere, so let me go into pre-med (Ana, Interview 1, p. 8). • I started looking up like what does it take to be a meteorologist, what does it require, and stuff like that ... So I was like okay, this is perfect, like I'm so good at science, and I'm so good at math, like this is exactly what I wanna do, like I'm meant for this. But I changed my mind (Claire, Interview 2, p. 2). • I believed it could present me with good job opportunities after graduation (Diego, Questionnaire, Q1). • It led to a good job and, you know, it just in general just a good career to follow (Diego, Interview 2, p. 2). • The fact that it's a job that you can have job security, especially today when that may not be, you know, that cannot be said for all the majors out there (Diego, Interview 2, p. 3). • I had an understanding that engineers, once they're done with their bachelor's degree, they can get the job fast and they don't have to worry (Diego, Interview 2, p. 4). • I knew that a degree in economics would offer me an array of options for careers (Isabella, Questionnaire, Q1). • I knew that if I studied BIMS, I would have had a lot of career paths that I could've chosen from (Isabella, Interview 2, p. 2). • I did look into public health, and I thought it was really interesting because I was really set on going to medical school with that kind of degree (Olivia, Interview 2, p. 1). • I realized that that was actually an industry, I saw that it was a big industry at that too, I saw that there was a chance at it (Santana, Interview 2, p. 3).
	<p>Lack of exploration (light maroon)</p> <ul style="list-style-type: none"> • It was so hard and intimidating knowing that there were hundreds of majors to choose from, and I just didn't know what I wanted to do or where I wanted to go (Isabella, Interview 2, p. 2). • I did not think it through at all (Michelle, Interview 2, p. 2). • I wish I would've done more research myself, but I was just like where do I begin, how do I start this, you know, like, so that's why I chose psychology (Michelle, Interview 2, p. 4). • I saw the movie Twister ... and I thought that was the absolute coolest thing in the world because they would just chase those tornados (Claire, Interview 2, p. 2). • I tend to watch a lot of YouTube videos ... and like Mythbusters as well, that's a popular TV show ... and I was always amazed about all the stuff they can build and all the science behind that (Sean, Interview 2, p. 3). • I never really had the opportunity to like explore career choices (Pablo, Interview 1, p. 4). • I wanted to be a doctor, but I never did any research or familiarize myself with the process to go to medical school (Pablo, Interview 1, p. 12). • Primarily out of a whim as it was my backup to my backup to my backup which isn't something that I'm proud of to acknowledge (Santana, Questionnaire, Q1). • I really didn't know what kinda majors were out there, and I didn't know what I would like to do, and I didn't know what my skills could be applied to, which specific major (Sean, Interview 2, p. 5). • I was going in blind eye, even though I was valedictorian of my high school, no one ever asked "oh, what's your major or what do you think you should do?" no one ever said "oh, you're skills are in this." It was more like "just go to college, that's the number one goal" (Sean, Interview 2, p. 5). • I wasn't shown different jobs, I wasn't shown different majors, I wasn't shown like the variety of things (Sean, Interview 2, p. 6). <ul style="list-style-type: none"> ◦ High school experience (aqua) – 1st gen only! <ul style="list-style-type: none"> • In my high school I was in engineering based classes so it just felt natural to keep with engineering (Alex, Questionnaire, Q1). • I selected my original academic major due to encouragement of various high school teachers (Diego, Questionnaire, Q1). • I took a class, I took my AP environmental science class in my junior year [of high school]. And so I guess basically I based it off of that (Karina, Interview 2, p. 1). • I had been in like a medical program kinda thing in high school, and I enjoyed it, so I just thought because I have this background, then public health and like medical school is like the thing for me (Olivia, Interview 2, p. 2). • I don't know how to describe it, like [my high school biology teacher] has done way more than we'll possibly do, but she's not even a doctor, you know? So it's like well, maybe I'll become a doctor for her too, like in respect to what she's done for us (Pablo, Interview 2, p. 5).